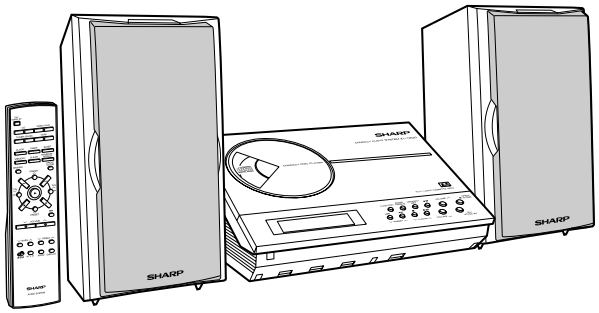
SHARP SERVICE MANUAL

No. S5235XLT200H/



COMPACT AUDIO SYSTEM

MODEL XL-T200H

XL-T200H Compact Audio System consisting of XL-T200H (main unit) and CP-XLT200H (speaker system).

COMPACT disc DIGITAL AUDIO

R·D·S

SAVING ENERGY STAND-BY POWER CONSUMPTION 0.6W

ENERGY

(Except for U.K.)

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

This Service Manual is for the XL-T200H, which is a minor modification model of the XL-T300H. This Service Manual, therefore, describes only the changed points from the Service Manual. Please refer to the XL-T300H Service Manual (S4225XLT300H/) together with this Service Manual.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

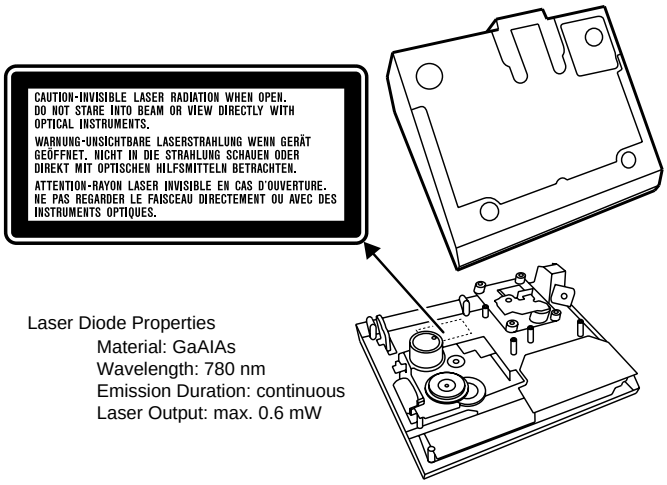
SAFETY PRECAUTION FOR SERVICE MANUAL

This product is classified as a CLASS 1 LASER PRODUCT.

Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output is less than Class 1 but the laser component is capable of emitting radiation exceeding the limit for Class1. Therefore it is important that the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam.

(1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
(2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
(3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
(4) Under no circumstances look directly into the Pickup Lens at any time.
(5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.


CAUTION-INVISIBLE LASER RADIATION WHEN OPEN.
DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
WARNUNG-UNSICHTBARE LASERSTRAHLUNG WENN GERÄT GEÖFFNET. NICHT IN DIE STRAHLUNG SCHAUEN ODER DIREKT MIT OPTISCHEN HILFSMITTELN BETRACHTEN.
ATTENTION-RAYON LASER INVISIBLE EN CAS D'OUVERTURE. NE PAS REGARDER LE FAISCEAU DIRECTEMENT OU AVEC DES INSTRUMENTS OPTIQUES.

Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW

ADVERSEL-SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTE EN LÄPI.

VARNING-SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DELÄR ÖPPNAD. STIRRAEJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

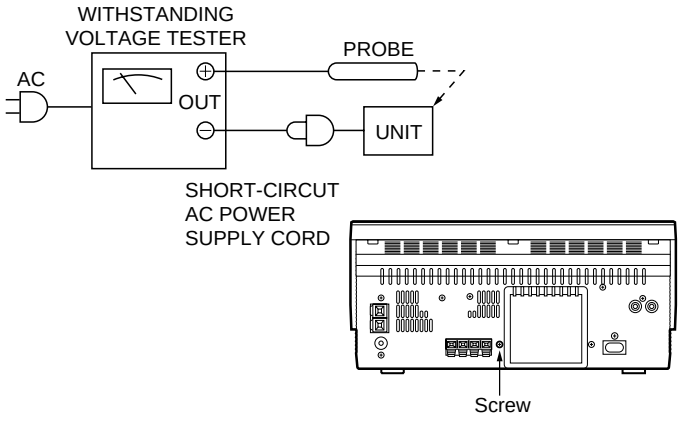
VARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASER-STRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

IMPORTANT SERVICE NOTES (FOR U.K. ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.

Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current(Cutoff current)	4 mA
Unit	
Judgment	
OK: The “GOOD” lamp lights. NG: The “NG” lamp lights and the buzzor sounds.	



FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

■ General

Power source	AC 230 V, 50 Hz
Power consumption	Power on: 26 W Power stand-by: 0.6 W
Dimensions	Width: 290 mm (11-7/16") Height: 130 mm (5-1/8") Depth: 260 mm (10-1/4")
Weight	2.8 kg (6.2 lbs.)

■ Amplifier

Output power	PMPO: 30 W (total) MPO: 15 W (7.5 W + 7.5 W) (DIN 45 324) RMS: 10 W (5 W + 5 W) (DIN 45 324)
Output terminals	Speakers: 4 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 kohms

■ CD player

Type	Compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

Specifications for this model are subject to change without prior notice.

■ Tuner

Frequency range	FM: 87.5 - 108 MHz AM: 522 - 1,620 kHz

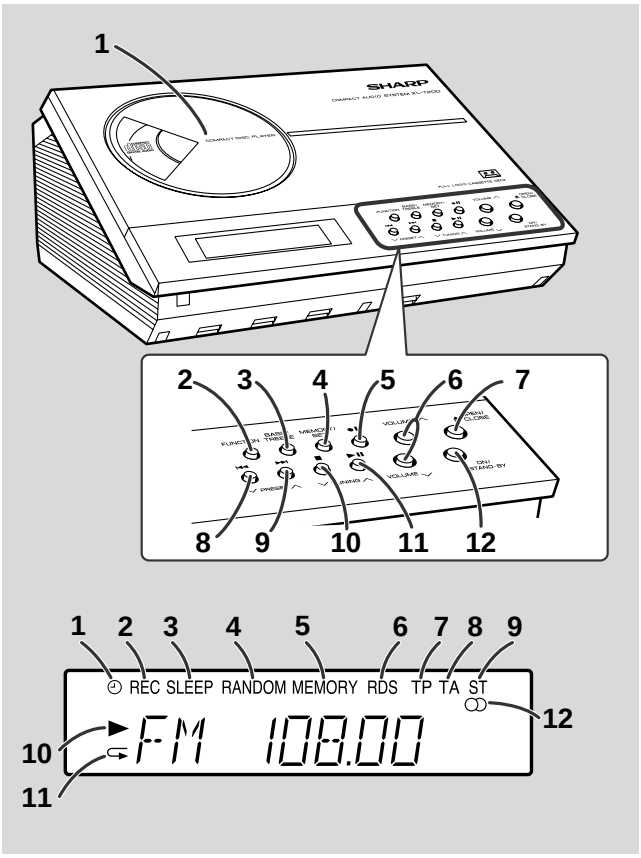
■ Cassette deck

Frequency response	50-14,000 Hz (Normal tape)
Signal/noise ratio	50 dB (recording/playback)
Wow and flutter	0.3 % (DIN 45 511)

■ Speaker

Tweeter	2-way type speaker system Tweeter 10 cm (4") Woofer
Maximum input power	10 W
Rated input power	5 W
Impedance	4 ohms
Dimensions	Width: 146 mm (5-3/4") Height: 267 mm (10-9/16") Depth: 186 mm (7-3/8")
Weight	1.5 kg (3.3 lbs.)/each

NAMES OF PARTS

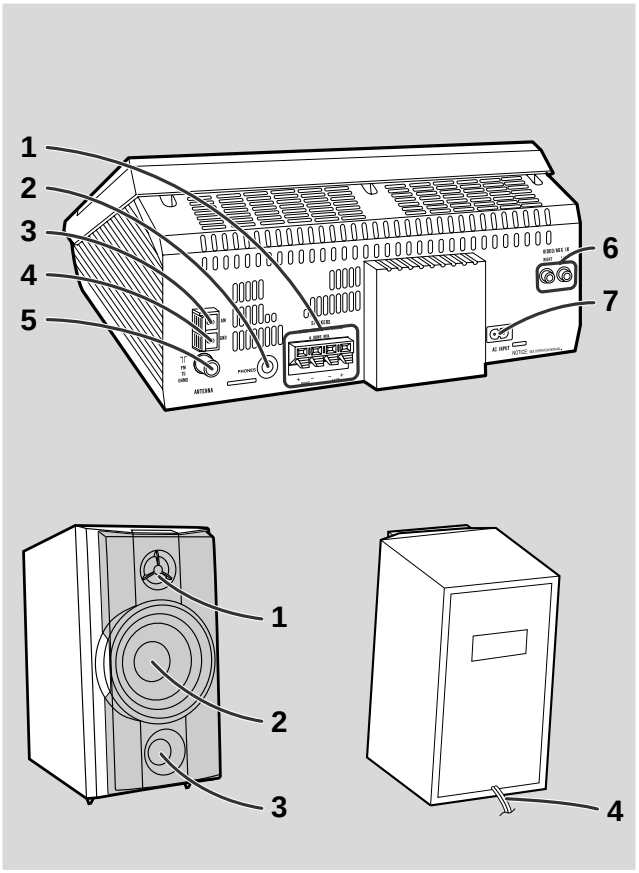


■ Front panel

1. CD/Cassette Compartment
2. Function Selector Button
3. Bass/Treble Selector Button
4. Memory/Set Button
5. Tape Record Pause Button
6. Volume Up and Down Buttons
7. CD or Tape Open/Close Button
8. CD Track Down or Fast Reverse, Tape Rewind, Tuner Preset Down Button
9. CD Track Up or Fast Forward, Tape Fast Forward, Tuner Preset Up Button
10. CD or Tape Stop, Tuning Down Button
11. CD Play or Pause, Tape Play, Tuning Up Button
12. On/Stand-by Button

■ Display

1. Timer Play Indicator
2. Tape Record Indicator
3. Sleep Indicator
4. CD Random Play Indicator
5. Memory Indicator
6. RDS Indicator
7. Traffic Programme Indicator
8. Traffic Announcement Indicator
9. FM Stereo Mode Indicator
10. CD Play Indicator
11. CD Repeat Play Indicator
12. FM Stereo Receiving Indicator



■ Rear panel

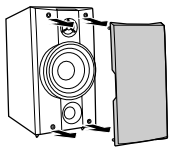
1. Speaker Terminals
2. Headphone Socket
3. AM Aerial Terminal
4. Aerial Earth Terminal
5. FM 75 Ohms Aerial Socket
6. Video/Auxiliary (Audio Signal) Input Sockets
7. AC Power Input Socket

■ Speaker system

1. Tweeter
2. Woofer
3. Bass Reflex Duct
4. Speaker Wire

Speaker grilles are removable:

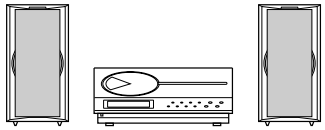
Make sure nothing comes into contact with the speaker diaphragms when you remove the speaker grilles.

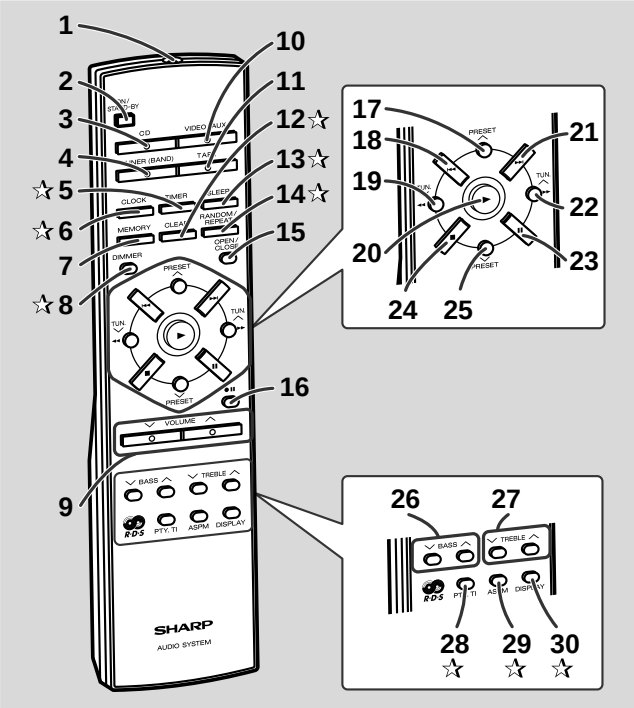


Placing the speaker system:

There is no distinction between the right and the left speakers.

Left speaker Right speaker





Buttons with "☆" mark in the illustration can be operated on the remote control only.

■ Remote control

1. Remote Control Transmitter
2. On/Stand-by Button
3. CD Button
4. Tuner and Band Selector Button
5. **Timer Button**
6. **Clock Button**
7. Memory Button
8. **Dimmer Button**
9. Volume Up and Down Buttons
10. Video/Auxiliary Button
11. Tape Button
12. **Clear Button**
13. **Sleep Button**
14. **Random/Repeat Button**
15. CD or Tape Open/Close Button
16. Tape Record Pause Button
17. Tuner Preset Up Button
18. CD Track Down Button
19. CD Fast Reverse, Tuning Down, Tape Rewind Button
20. CD or Tape Play Button
21. CD Track Up Button
22. CD Fast Forward, Tuning Up, Tape Fast Forward Button
23. CD Pause Button
24. CD or Tape Stop Button
25. Tuner Preset Down Button
26. Bass Up and Down Buttons
27. Treble Up and Down Buttons
28. **RDS Programme Type/ Traffic Information Search Button**
29. **RDS ASPM (Auto Station Programme Memory) Button**
30. **RDS Display Mode Selector Button**

DISASSEMBLY

Caution on Disassembly
Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:
1. Take compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x6 2. Hook ..... (A2) x4 3. Socket ..... (A3) x9 4. Flat Cable ..... (A4) x1	6-1,2 6-2
2	Bottom Cabinet /Chassis	1. Screw ..... (B1) x11 2. Hook ..... (B2) x3	6-1,3 6-3
3	Tuner PWB	1. Screw ..... (C1) x2 2. Socket ..... (C2) x1	7-1
4	Terminal PWB	1. Screw ..... (D1) x2 2. Socket ..... (D2) x1	7-1
5	Main PWB	1. Screw ..... (E1) x8 2. Socket ..... (E2) x2	7-1
6	CD Mechanism	1. Screw ..... (F1) x4	7-2
7	Tape Mechanism	1. Screw ..... (G1) x4	7-2
8	Gear Box	1. Screw ..... (H1) x3 2. Socket ..... (H2) x1	7-3
9	Switch PWB	1. Screw ..... (J1) x1	7-3
10	LED PWB/Holder PWB	1. Screw ..... (K1) x1	7-3
11	Display PWB /Switch PWB	1. Screw ..... (L1) x7 2. Hook ..... (L2) x4	7-3

Note:
After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

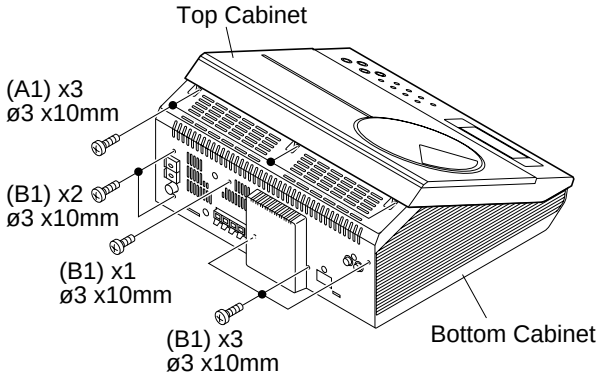


Figure 6-1

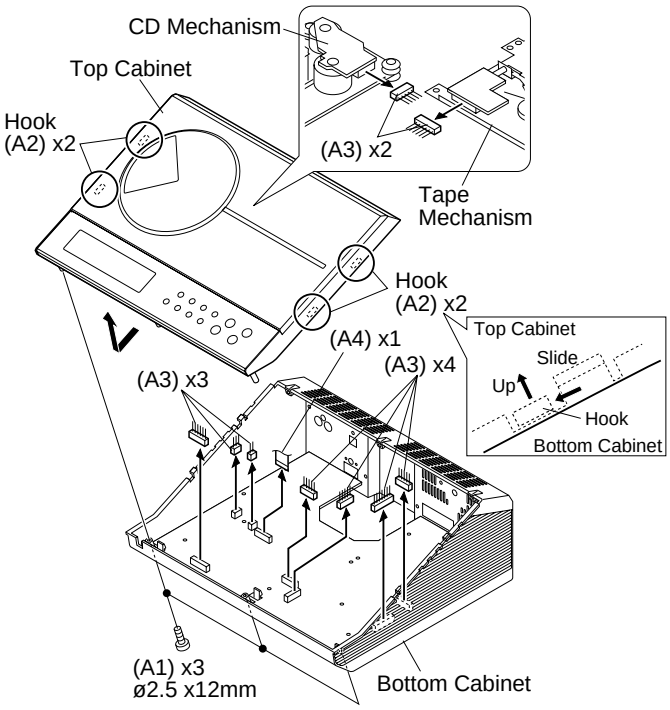


Figure 6-2

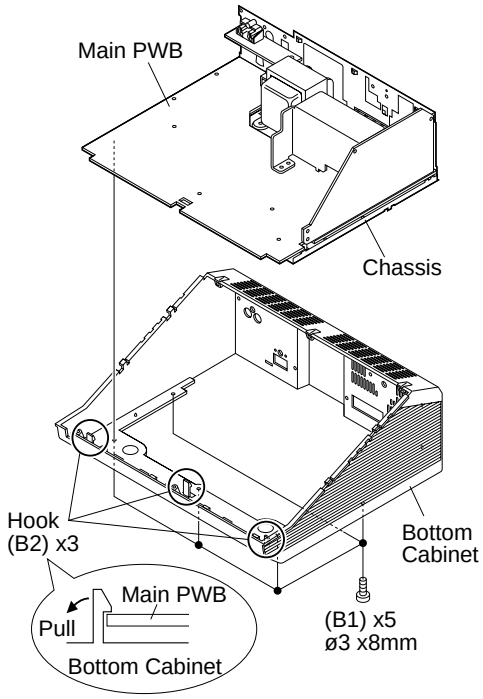


Figure 6-3

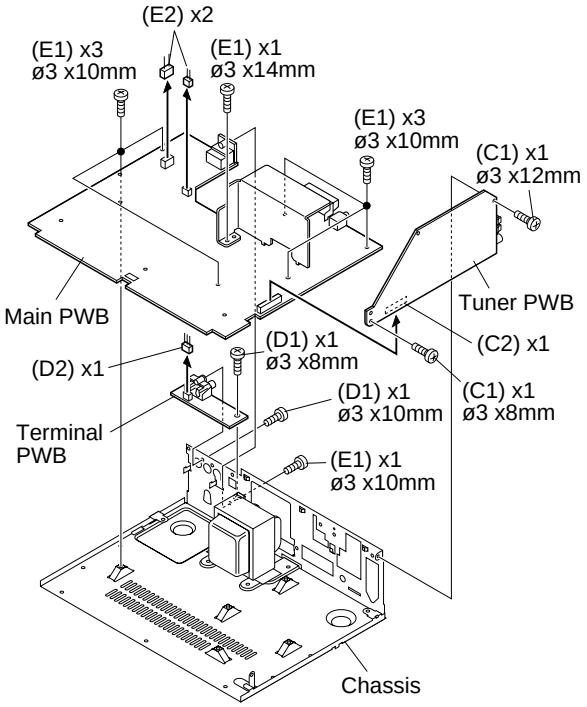


Figure 7-1

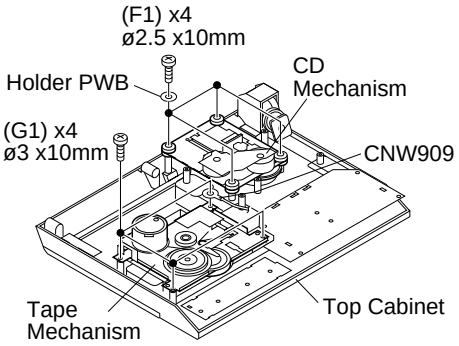


Figure 7-2

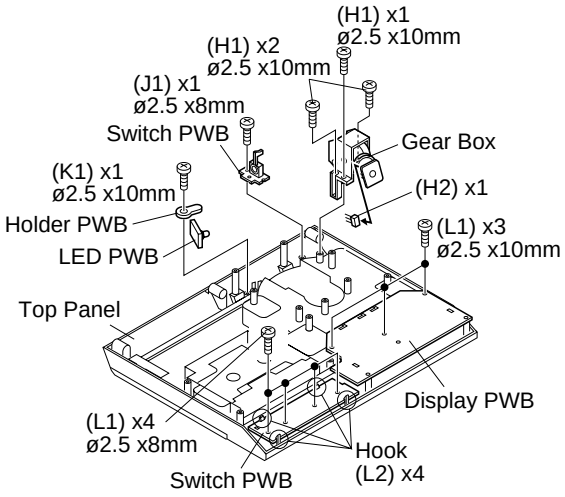


Figure 7-3

STEP	REMOVAL	PROCEDURE	FIGURE
1	Speaker	1. Net Frame ..... (A1) x1 2. Front Panel ..... (A2) x1 3. Screw ..... (A3) x4	7-4

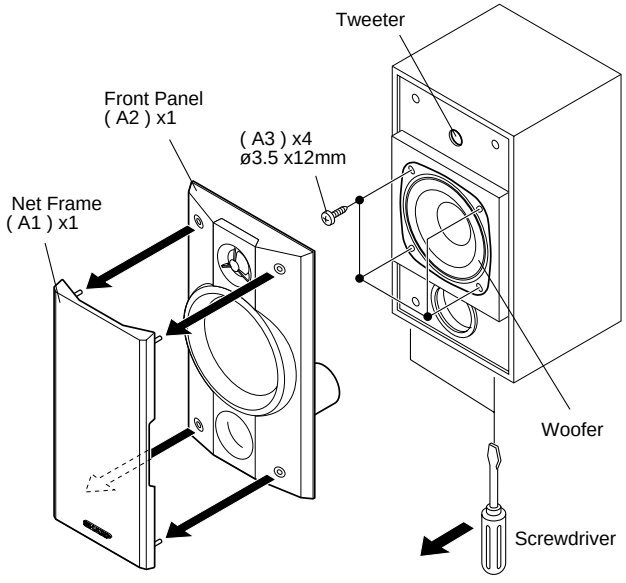


Figure 7-4

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 and 7 of the disassembly method to remove the tape mechanism. (See page 6,7.)

How to remove the record / playback and erase heads (See Fig. 8-1.)

1. Remove the screws (A1) x 2 pcs., to remove the erase head.
2. Remove the screws (A2) x 2 pcs., to remove the record/ playback head.

Note:

After replacing the heads and performing the azimuth adjustment, be sure to apply screwlock.

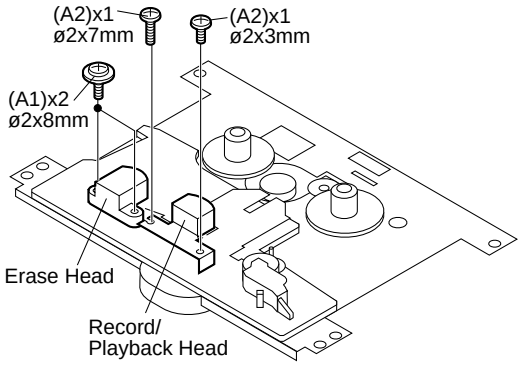


Figure 8-1

How to remove the pinch roller (See Fig. 8-2.)

1. Carefully bend the pinch roller pawl in the direction of the arrow **<A>**, and remove the pinch roller (B1) x 1 pc., upwards.

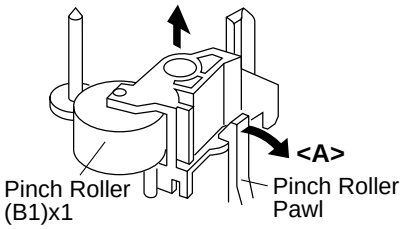


Figure 8-2

How to remove the belts (See Fig. 8-3.)

1. Remove the main belt (C1) x 1 pc., from the motor pulley.
2. Remove the FF/REW belt (C2) x 1 pc., from the REW/FF roller.
3. Put on the belts in the reverse order of removal.

Note:

When putting on the belt, ascertain that the belt is not twisted, and clean it.

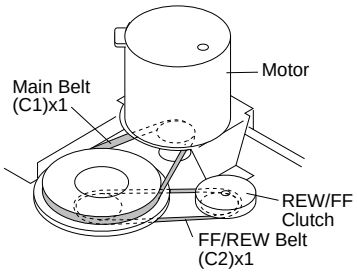


Figure 8-3

How to remove the motor (See Figs. 8-4.)

1. Remove the mainbelt.
2. Remove the screws (D1) x 2 pcs., to remove the motor bracket.
3. Remove the screws (D2) x 3 pcs., to remove the motor.

Note:

When mounting the motor, pay attention to the motor mounting angle

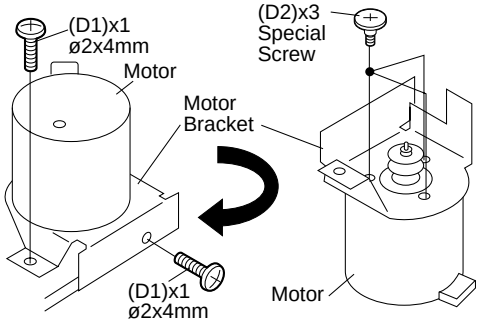


Figure 8-4

How to remove the flywheel (See Fig. 8-5.)

1. Remove the belt.
2. Remove the stop washer (E1) x 1 pc., with a small precision screwdriver to extract the flywheel from the capstan metal.

Note:

When the stop washer is deformed or damaged, replace it with a new one.

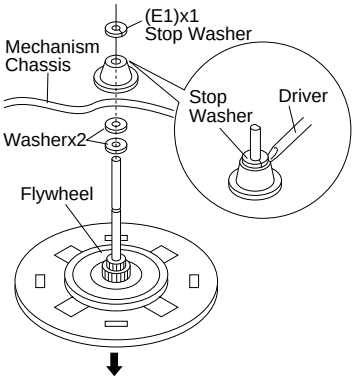


Figure 8-5

How to reinstall the parts

Install each part in the reverse order of the removal with care.

How to remove the tape mechanism PWB (See Fig. 9-1.)

1. Remove the screws (F1) x 1 pc., to remove the tape mechanism PWB.
2. Remove the screws (F2) x 1 pc.
3. Remove the solder joints (F3) x 2 pcs., to remove the tape mechanism PWB.

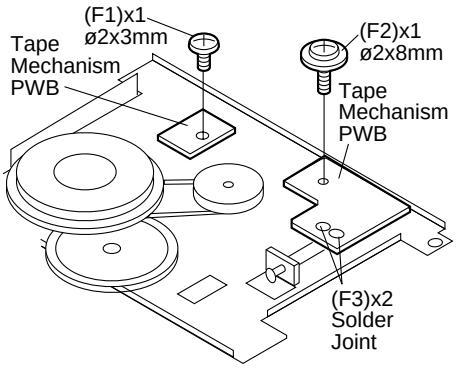


Figure 9-1

How to remove the CD lid (See Fig. 9-2.)

Perform steps 1 and 8 of the disassembly method to remove the gear box.(See page 6,7)

1. Remove the screws (A1) x 2 pcs., to remove the CD lid motor.
2. Remove the hooks (A2) x 3 pcs., to remove the worm wheel.

Caution:

Be careful so that the gear is not damaged.
(The damage gear emits noise during searching.)

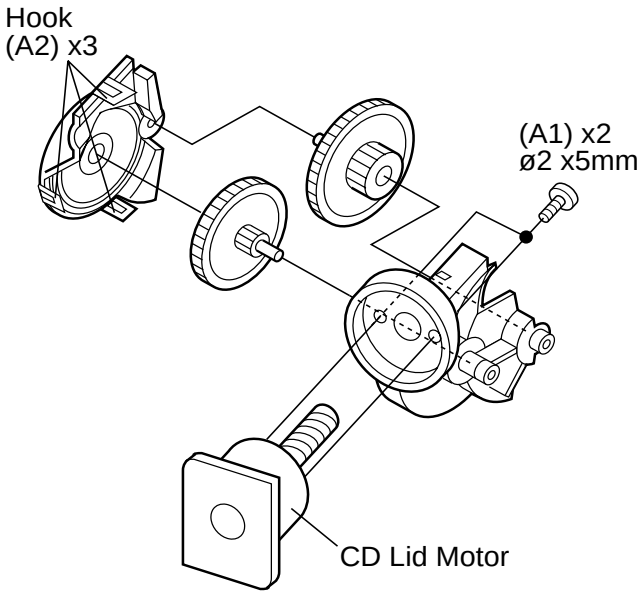


Figure 9-2

CD MECHANISM SECTION (See Fig. 9-3.)

Perform steps 1 and 6 of the disassembly method to remove the CD mechanism.(See page 6,7)

1. Remove the mechanism cover, paying attention to the pawls (A1)x 4 pcs.
2. Remove the screws (A2) x 2 pcs., to remove the shaft (A3) x 1 pc.
3. Remove the stop washer (A4) x 1 pc., to remove the gear (A5) x 1 pc.
4. Remove the pickup unit.

Note:

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

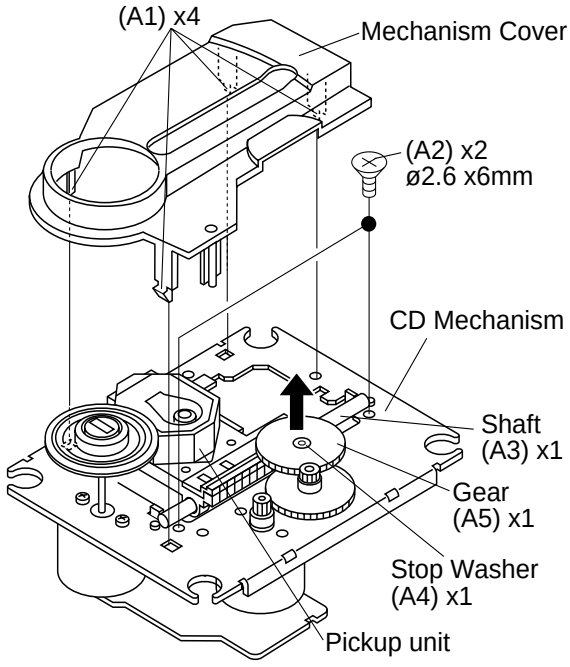


Figure 9-3

NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     ( ) : AM mode
     : FM stereo mode
  2. In the CD section, the CD is stopped.
- Parts marked with “⚠” (⊏ ニ ニ ニ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW702	PICKUP IN	ON—OFF
SW709	ON/STAND-BY	ON—OFF
SW710	CD LID OPEN/CLOSE	ON—OFF
SW711	VOLUME DOWN	ON—OFF
SW712	VOLUME UP	ON—OFF
SW721	FUNCTION	ON—OFF
SW722	REW/PRESET DOWN	ON—OFF
SW723	FF/PRESET UP	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW724	BASS/TREBLE	ON—OFF
SW725	CD STOP/CLEAR/TUNING DOWN	ON—OFF
SW726	MEMORY/SET	ON—OFF
SW727	CD PLAY/PAUSE/TUNING UP	ON—OFF
SW728	REC/PAUSE	ON—OFF
SW802	CD LID	ON—OFF
SW901	FOOL PROOF	ON—OFF
SW902	CAM	ON—OFF

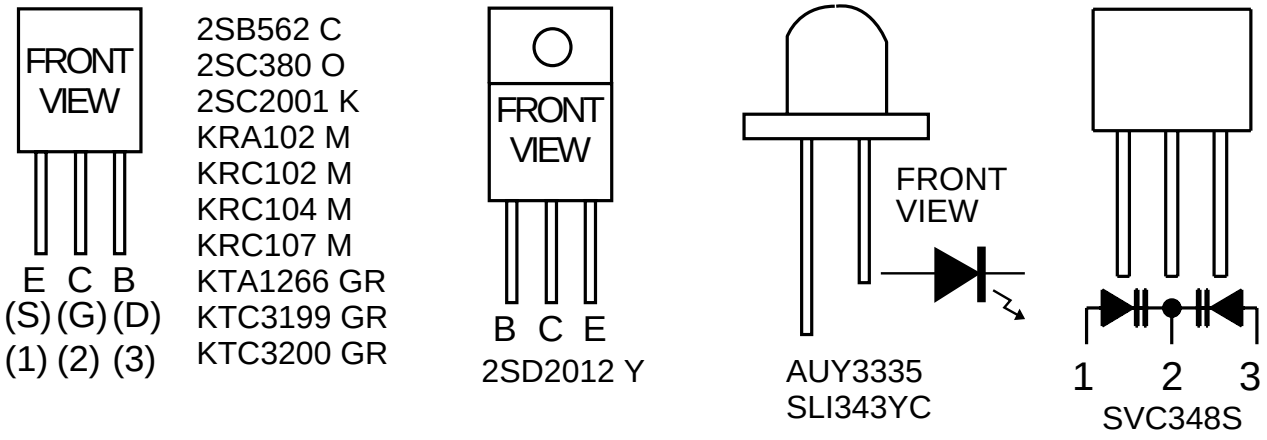


Figure 10 TYPES OF TRANSISTOR AND LED

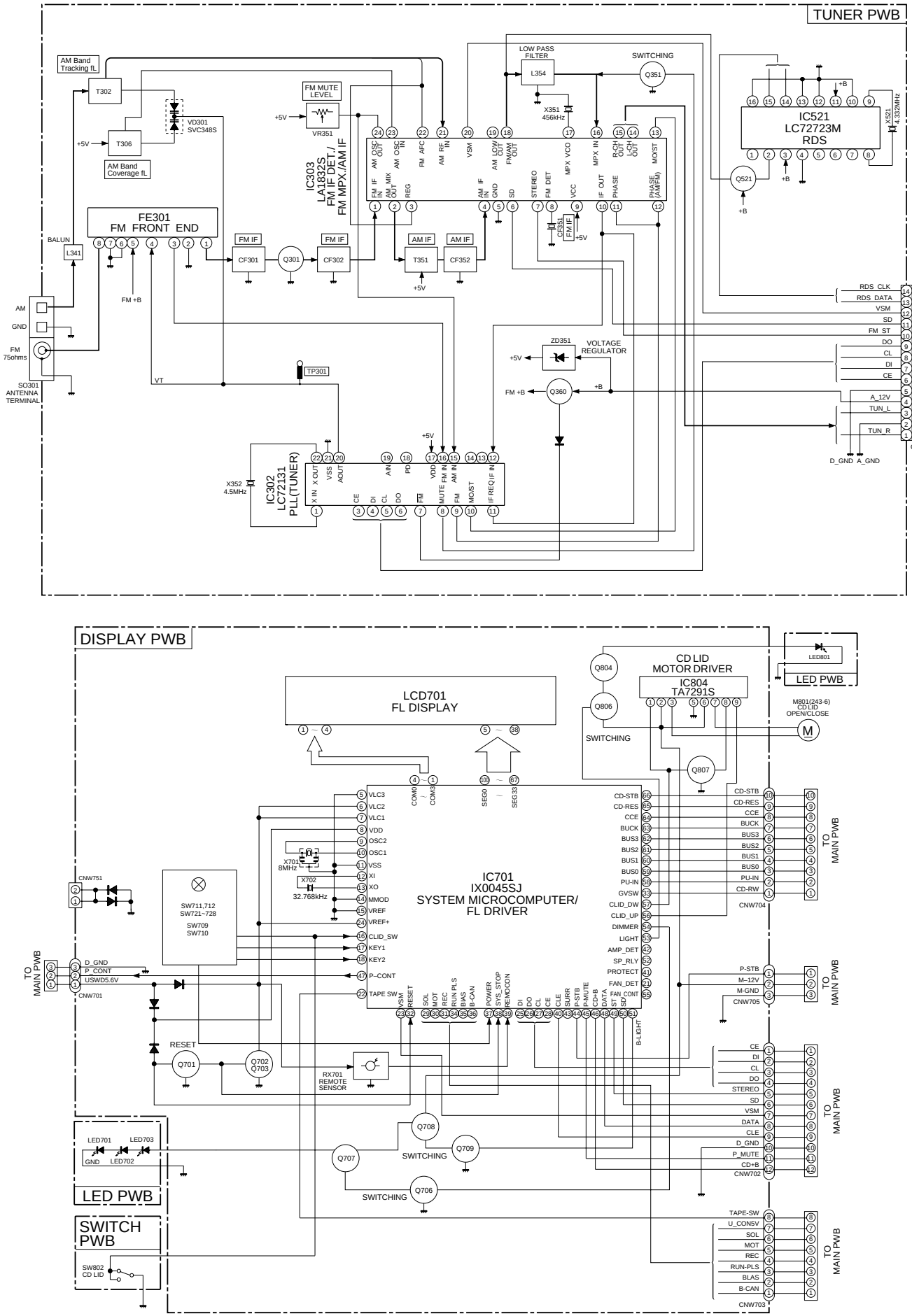


Figure 11 BLOCK DIAGRAM (1/3)

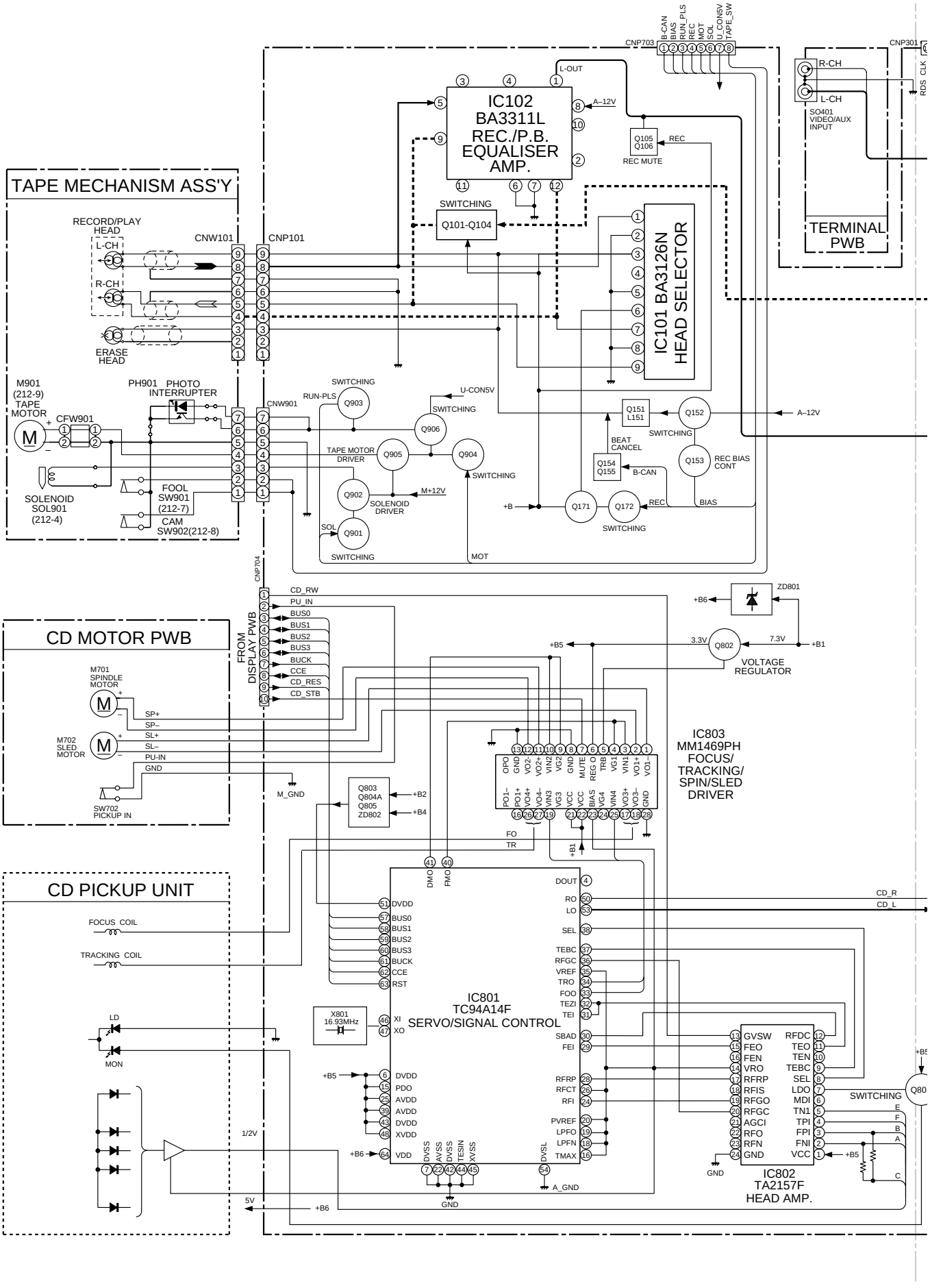


Figure 12 BLOCK DIAGRAM (2/3)

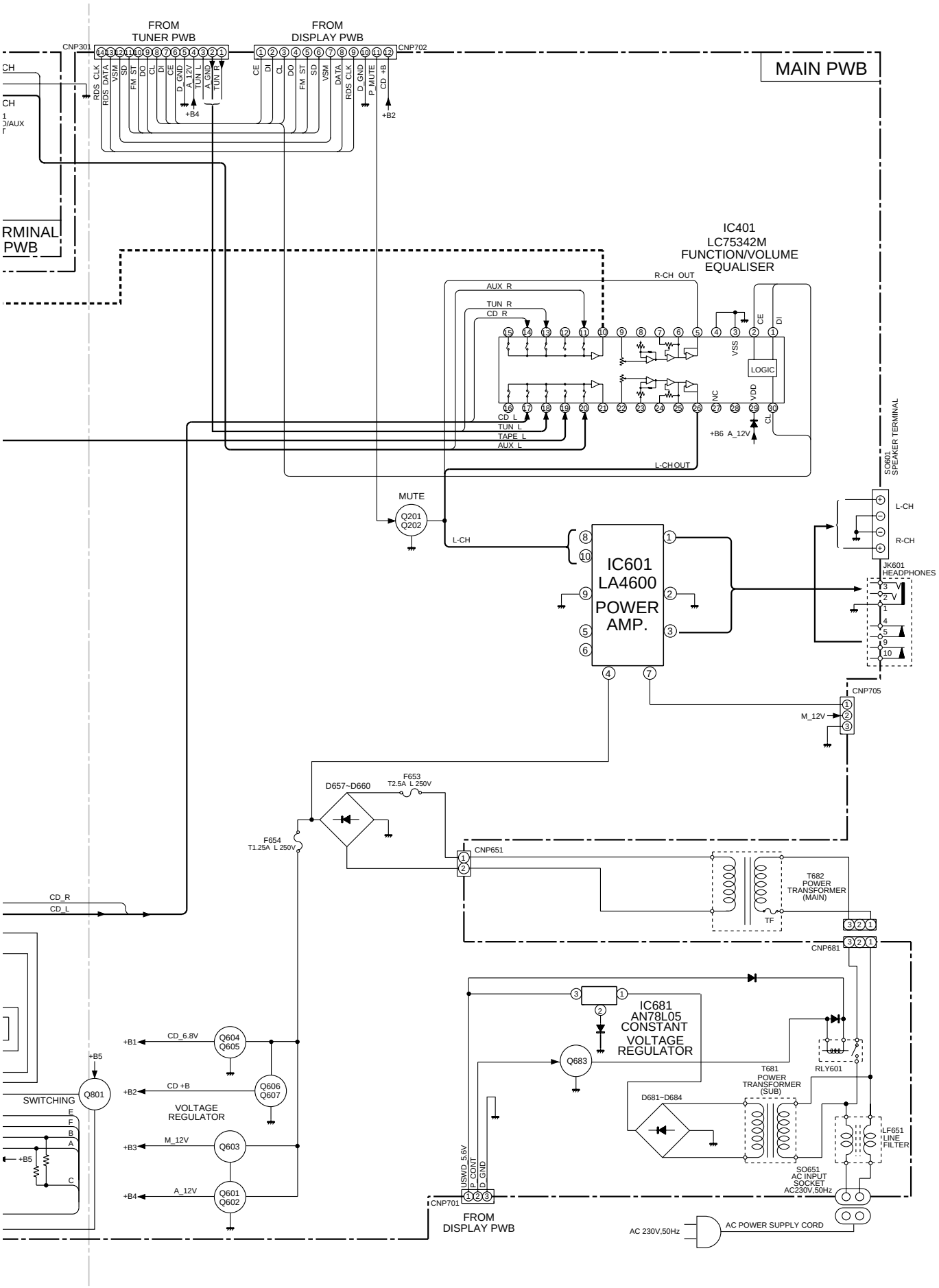


Figure 13 BLOCK DIAGRAM (3/3)

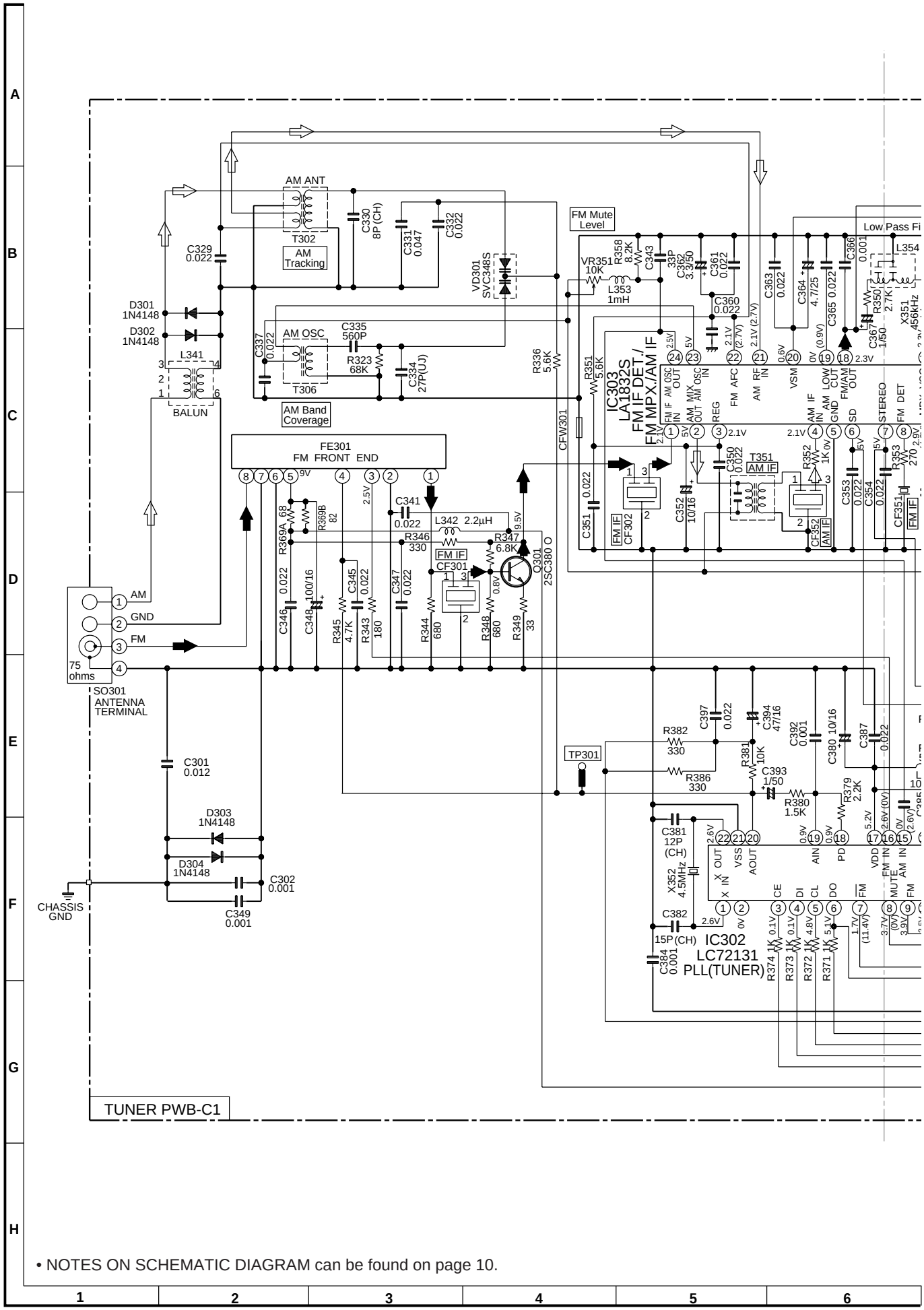
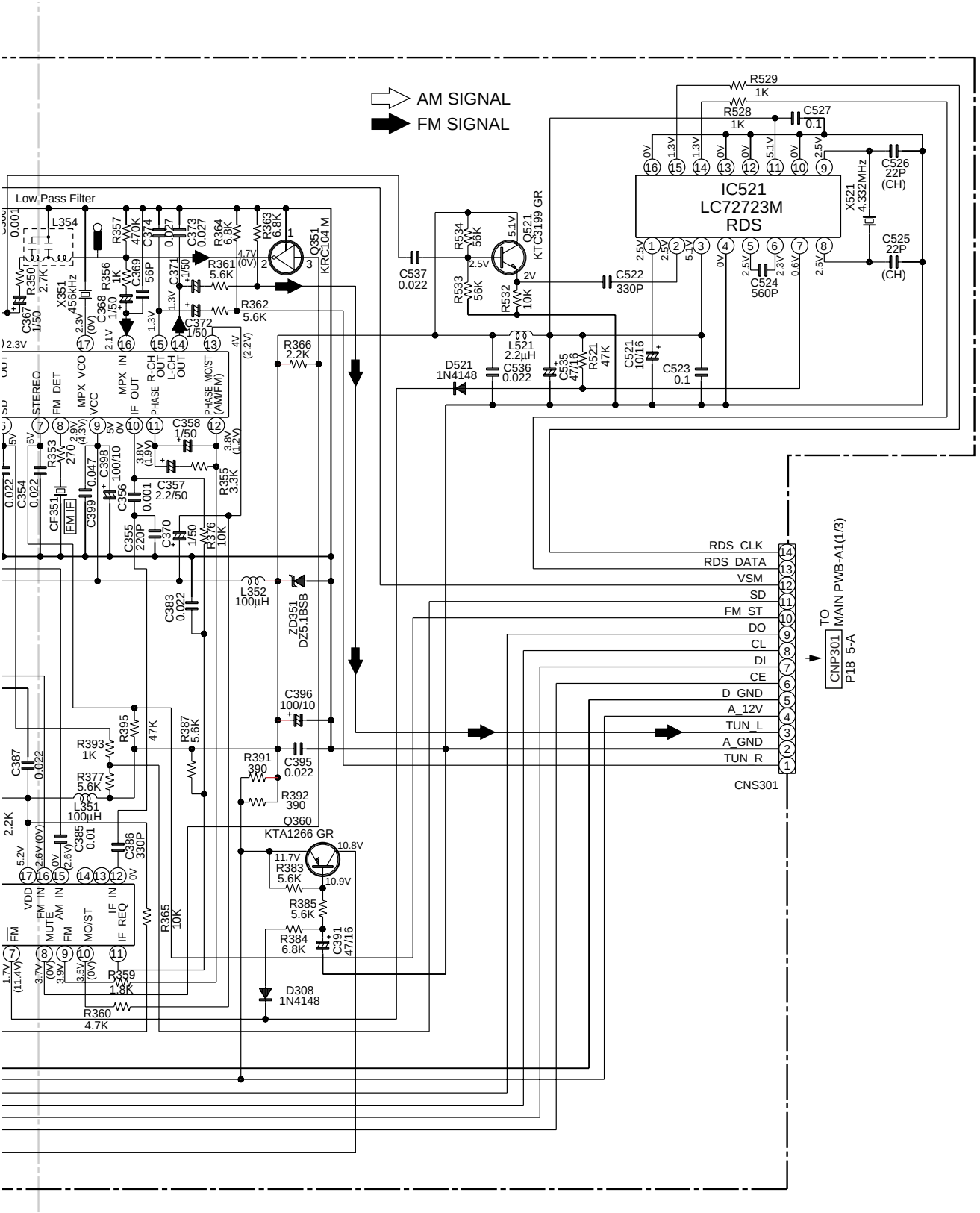
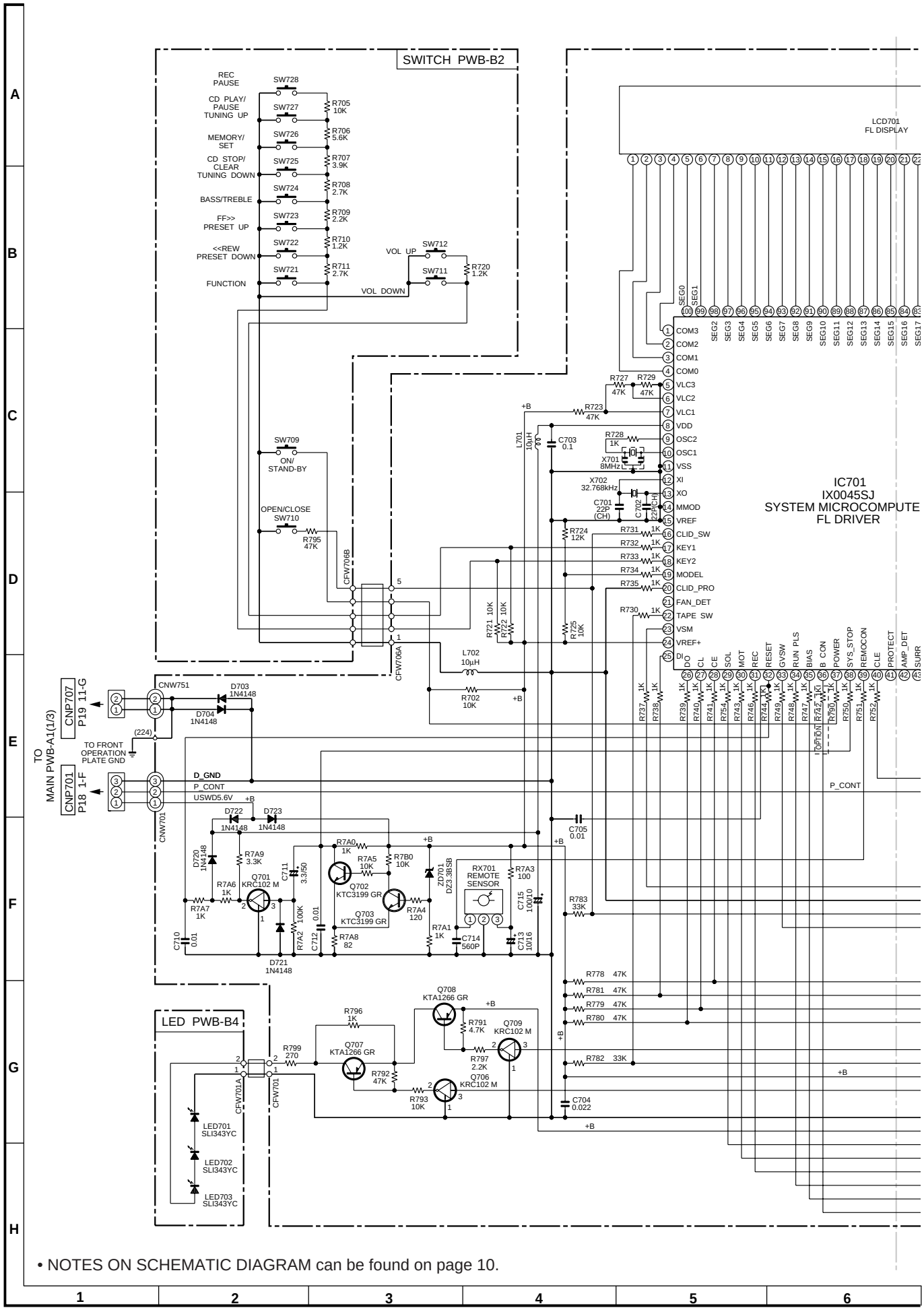


Figure 14 SCHEMATIC DIAGRAM (1/10)



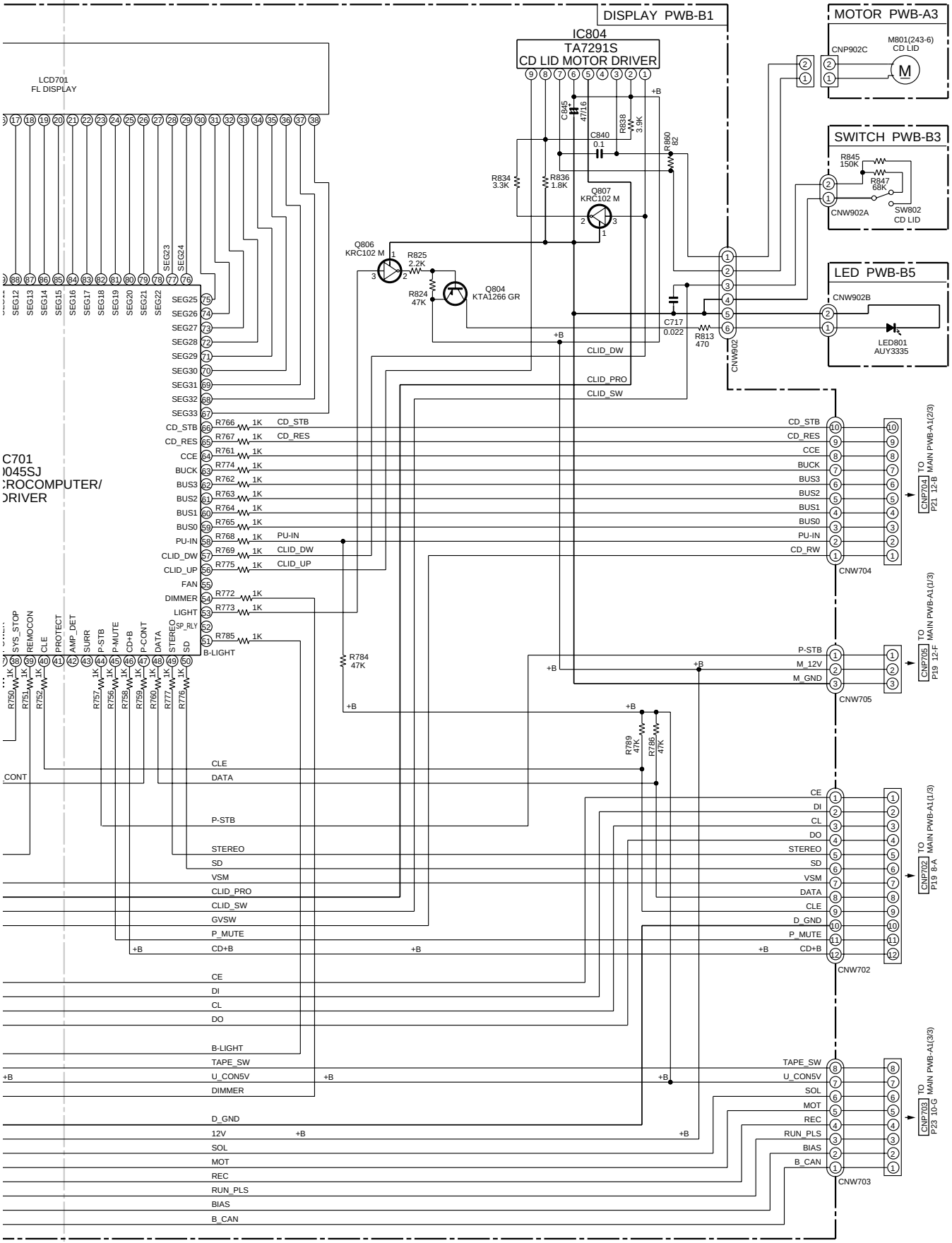
7	8	9	10	11	12

Figure 15 SCHEMATIC DIAGRAM (2/10)



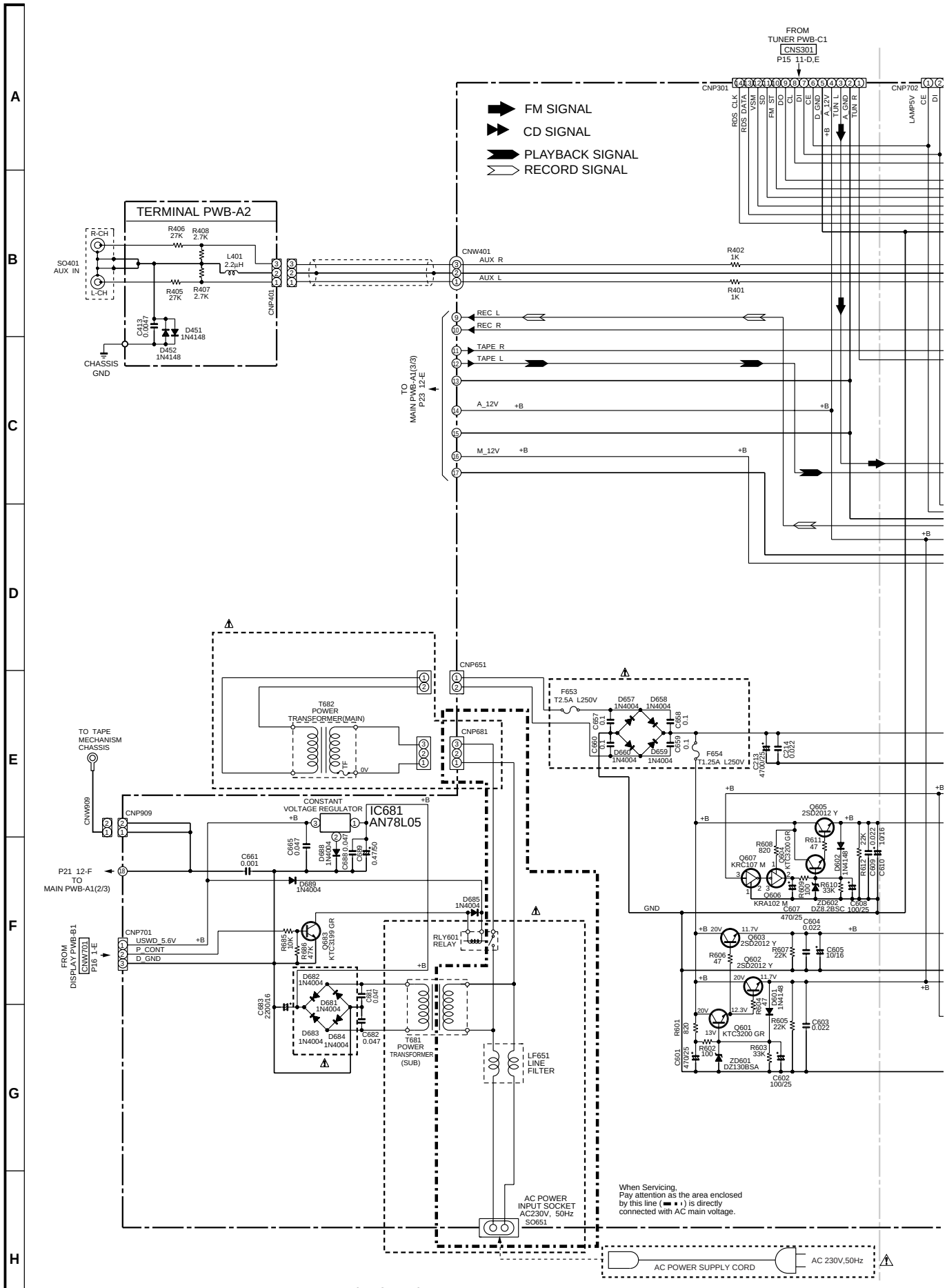
• NOTES ON SCHEMATIC DIAGRAM can be found on page 10.

Figure 16 SCHEMATIC DIAGRAM (3/10)



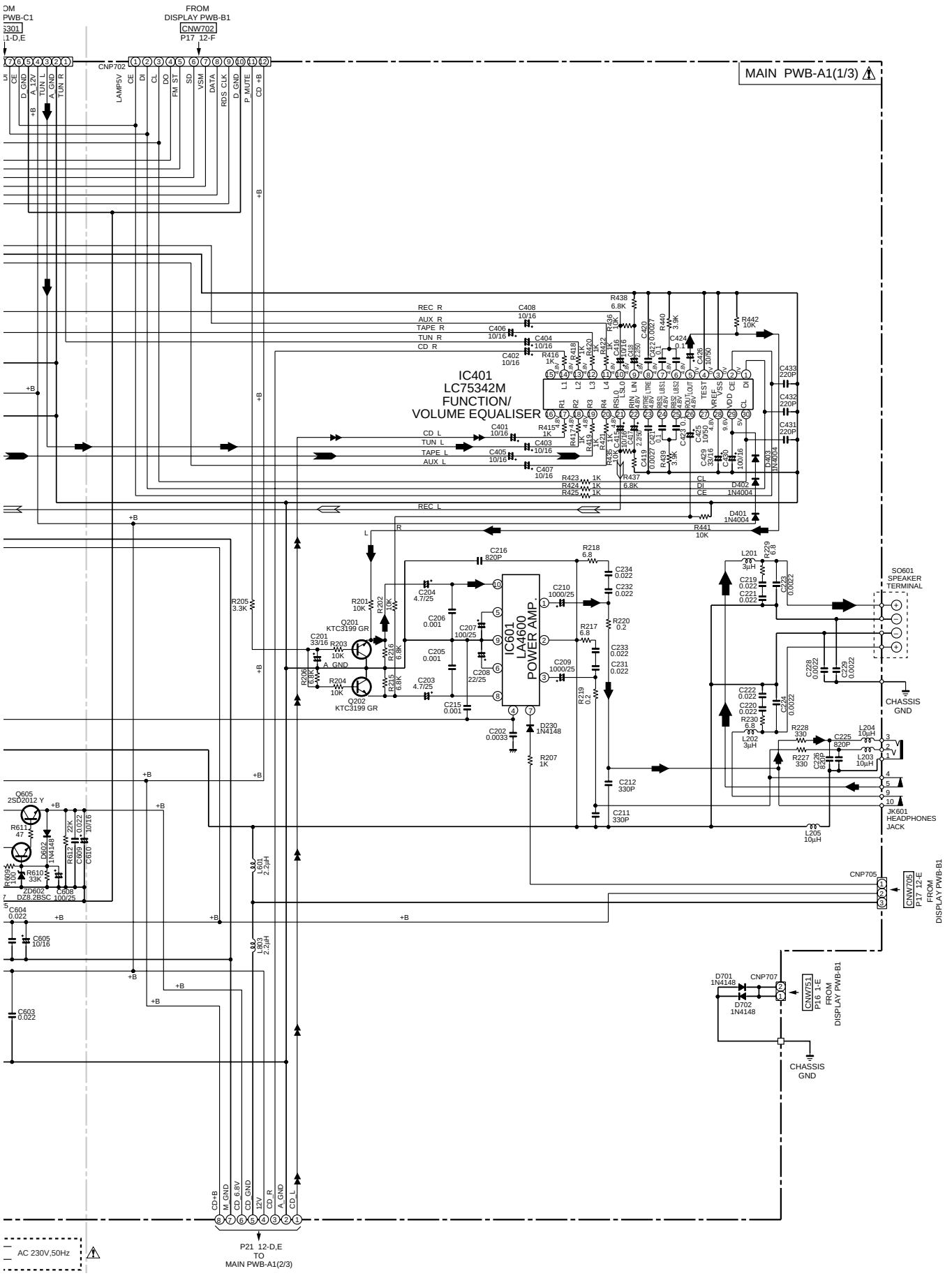
7	8	9	10	11	12

Figure 17 SCHEMATIC DIAGRAM (4/10)



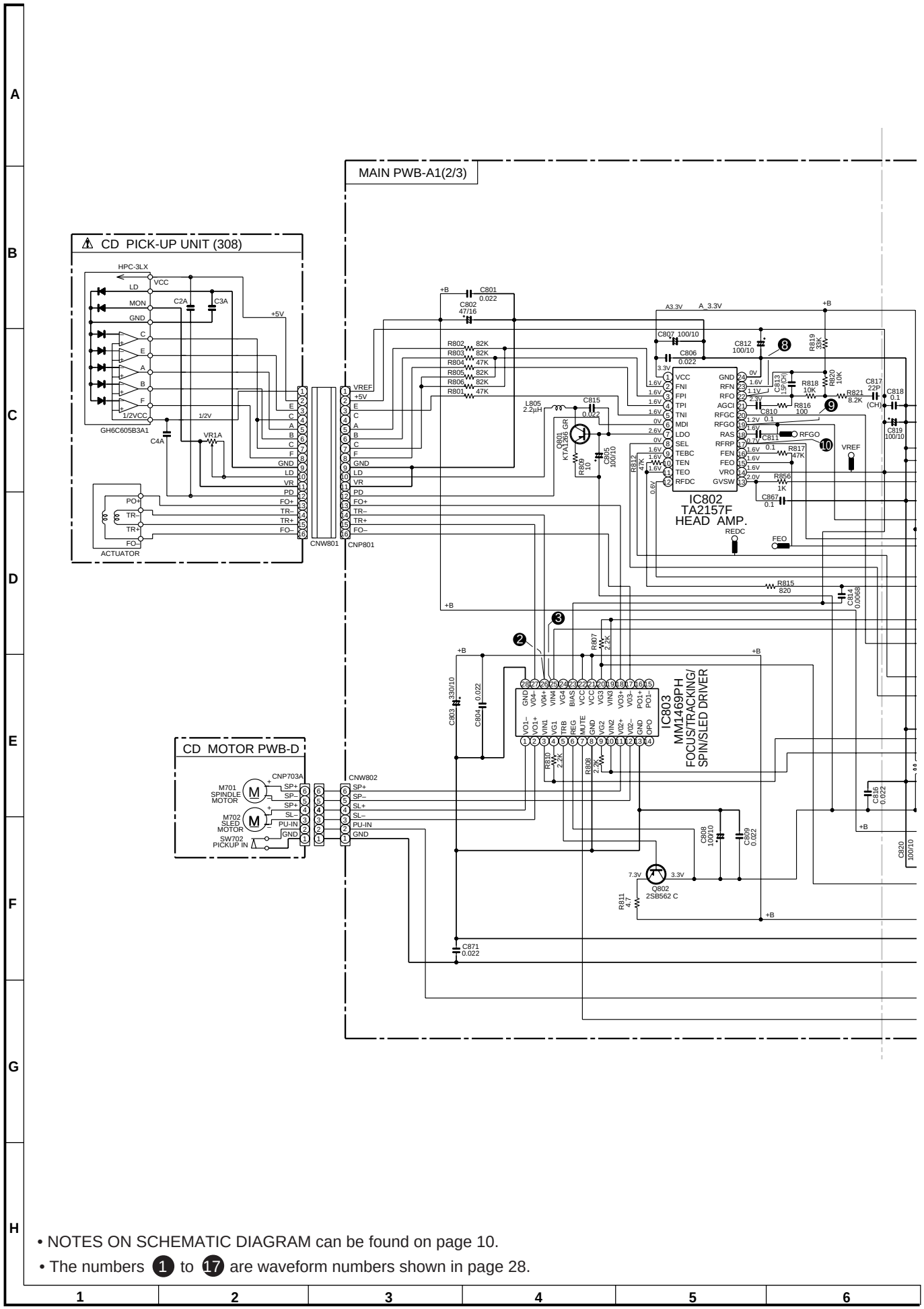
• NOTES ON SCHEMATIC DIAGRAM can be found on page 10.

Figure 18 SCHEMATIC DIAGRAM (5/10)



7	8	9	10	11	12

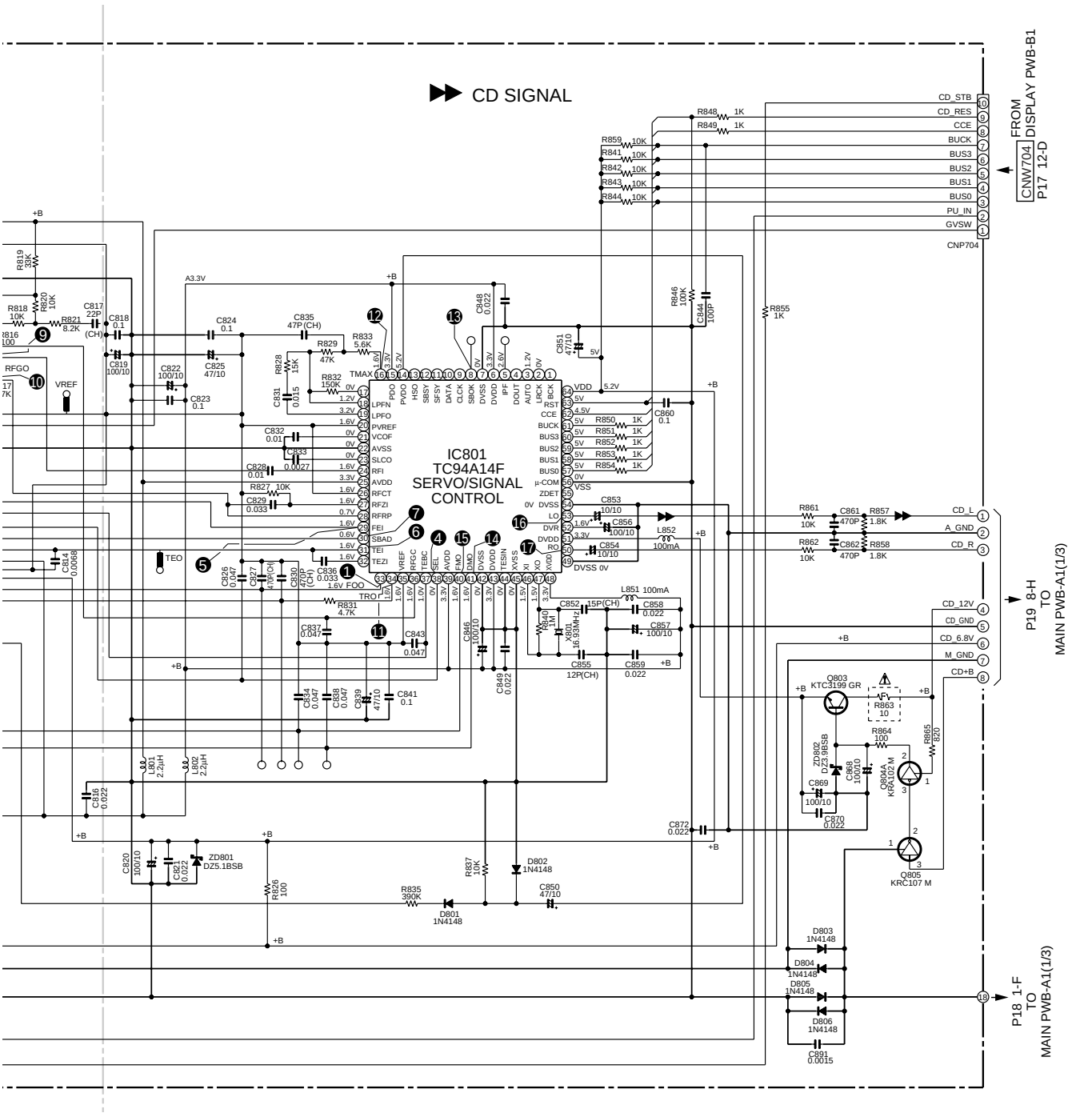
Figure 19 SCHEMATIC DIAGRAM (6/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 10.

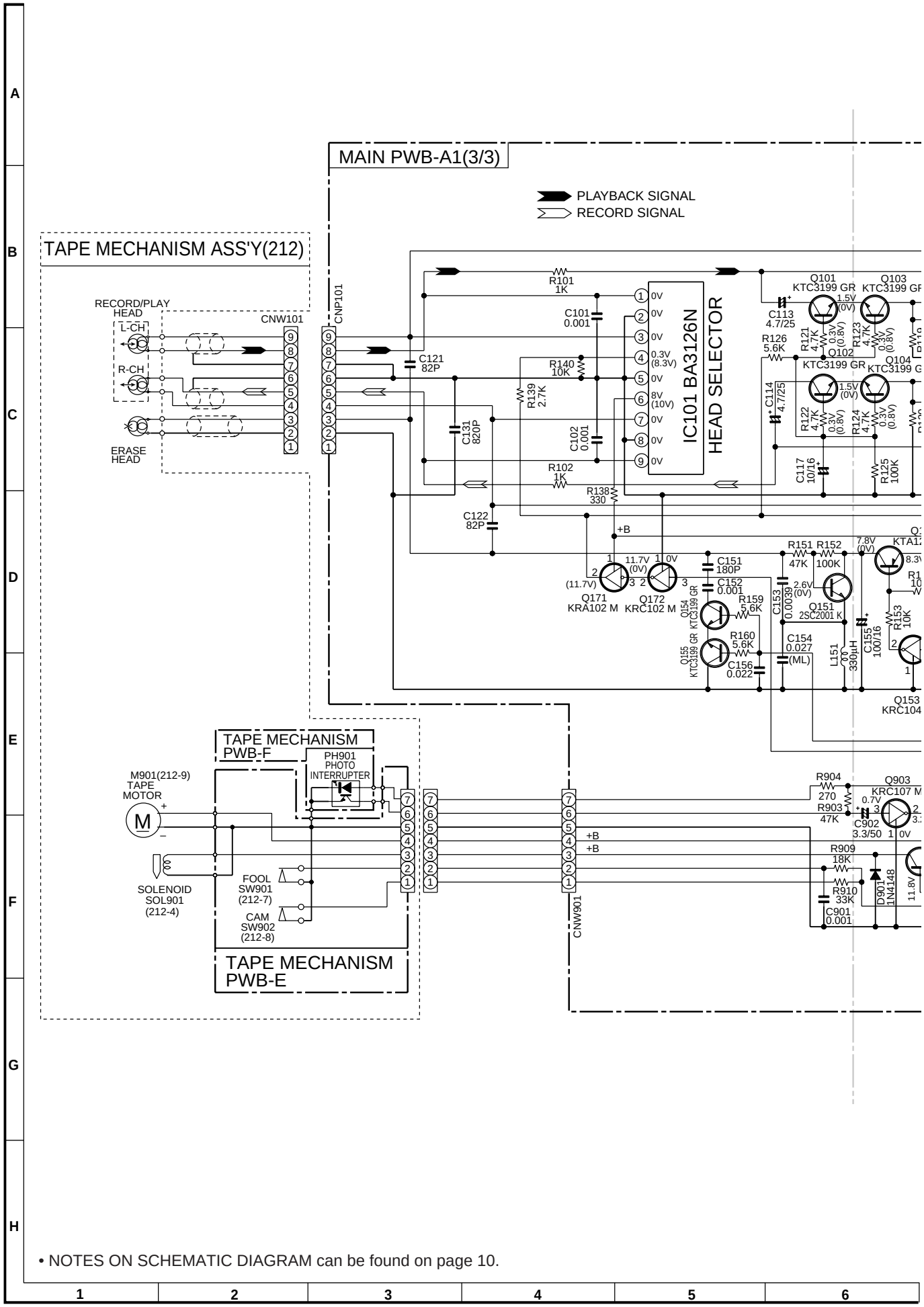
• The numbers ❶ to ⓱ are waveform numbers shown in page 28.

Figure 20 SCHEMATIC DIAGRAM (7/10)



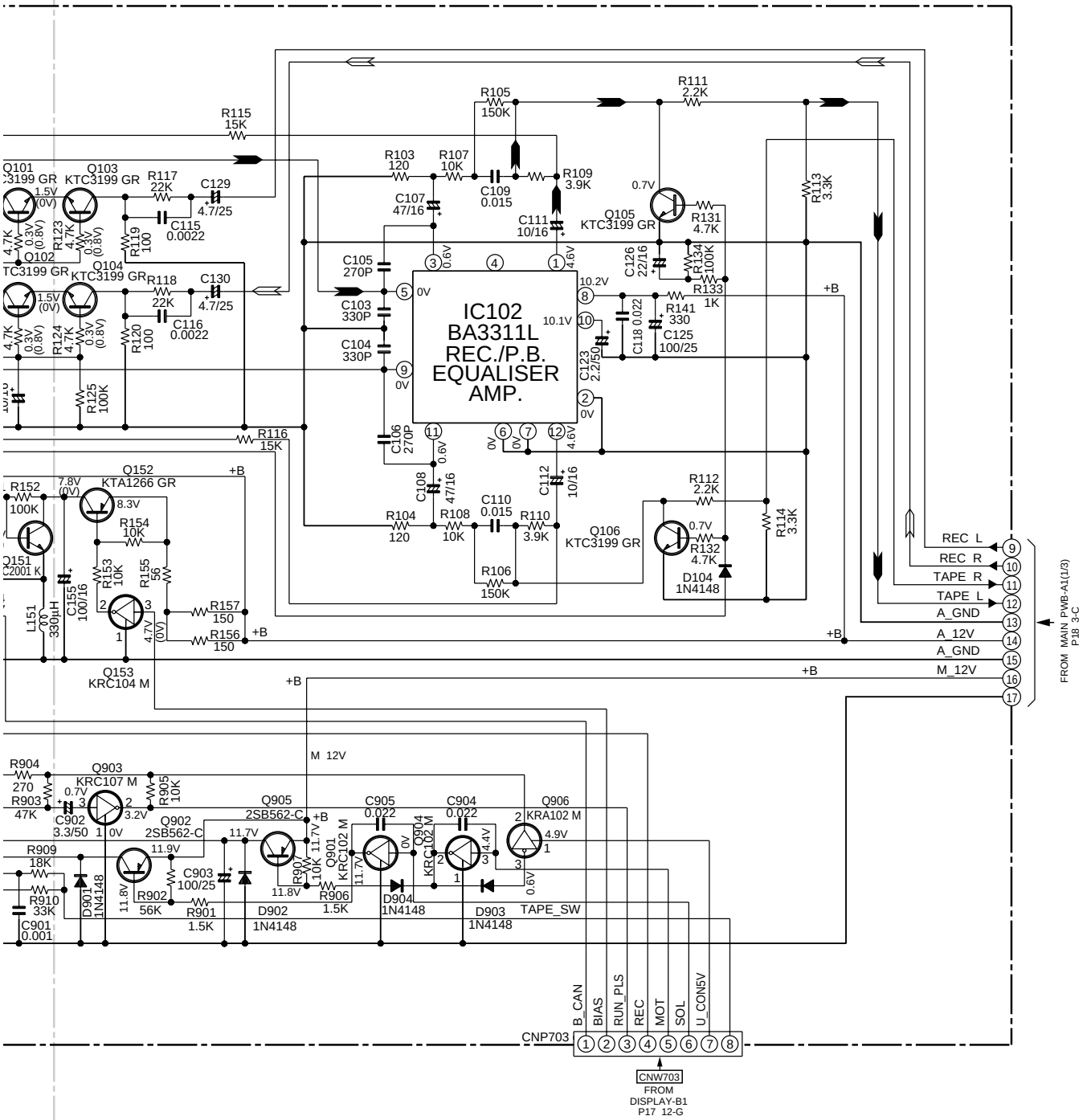
7	8	9	10	11	12

Figure 21 SCHEMATIC DIAGRAM (8/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 10.

Figure 22 SCHEMATIC DIAGRAM (9/10)



7	8	9	10	11	12

Figure 23 SCHEMATIC DIAGRAM (10/10)

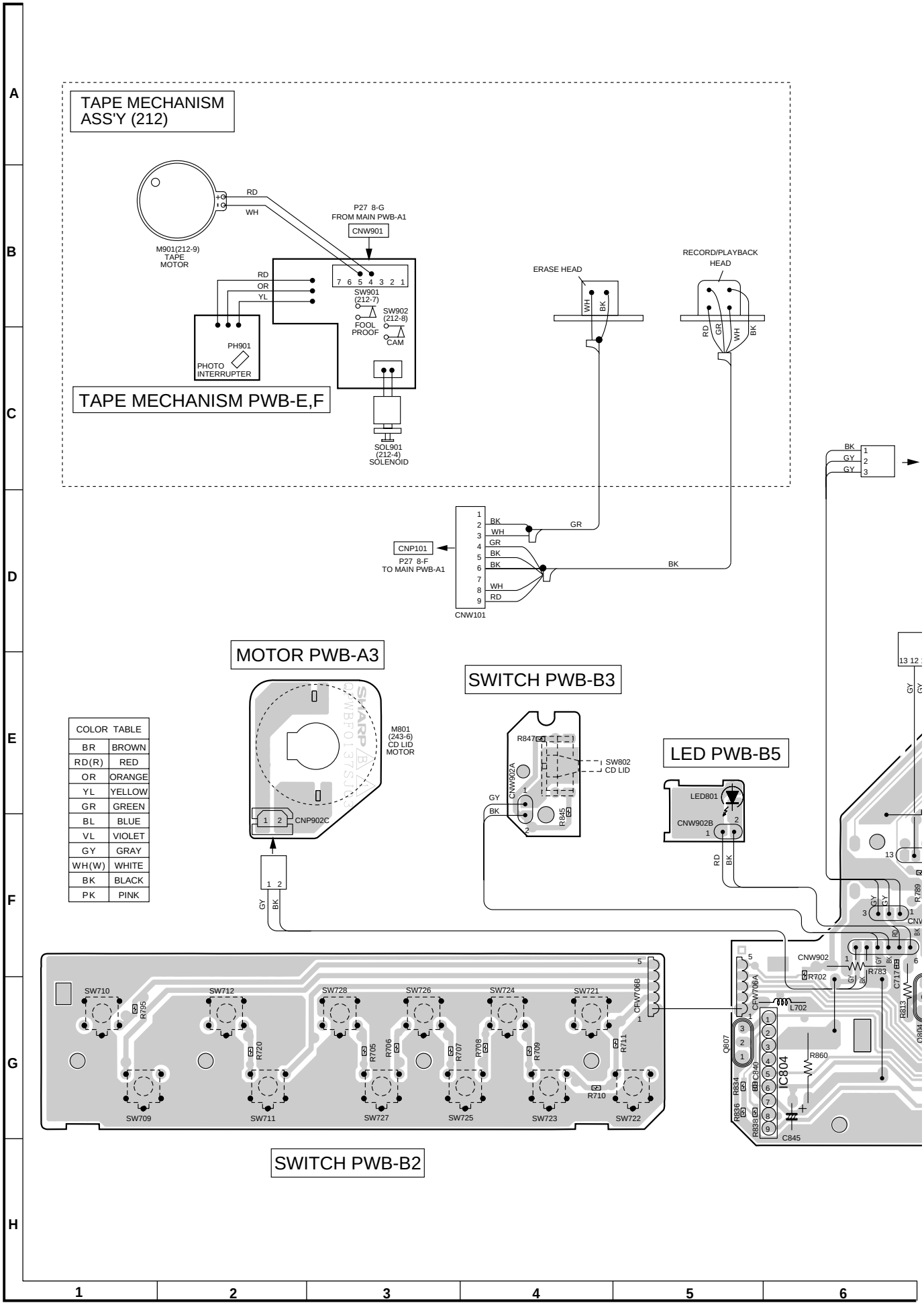
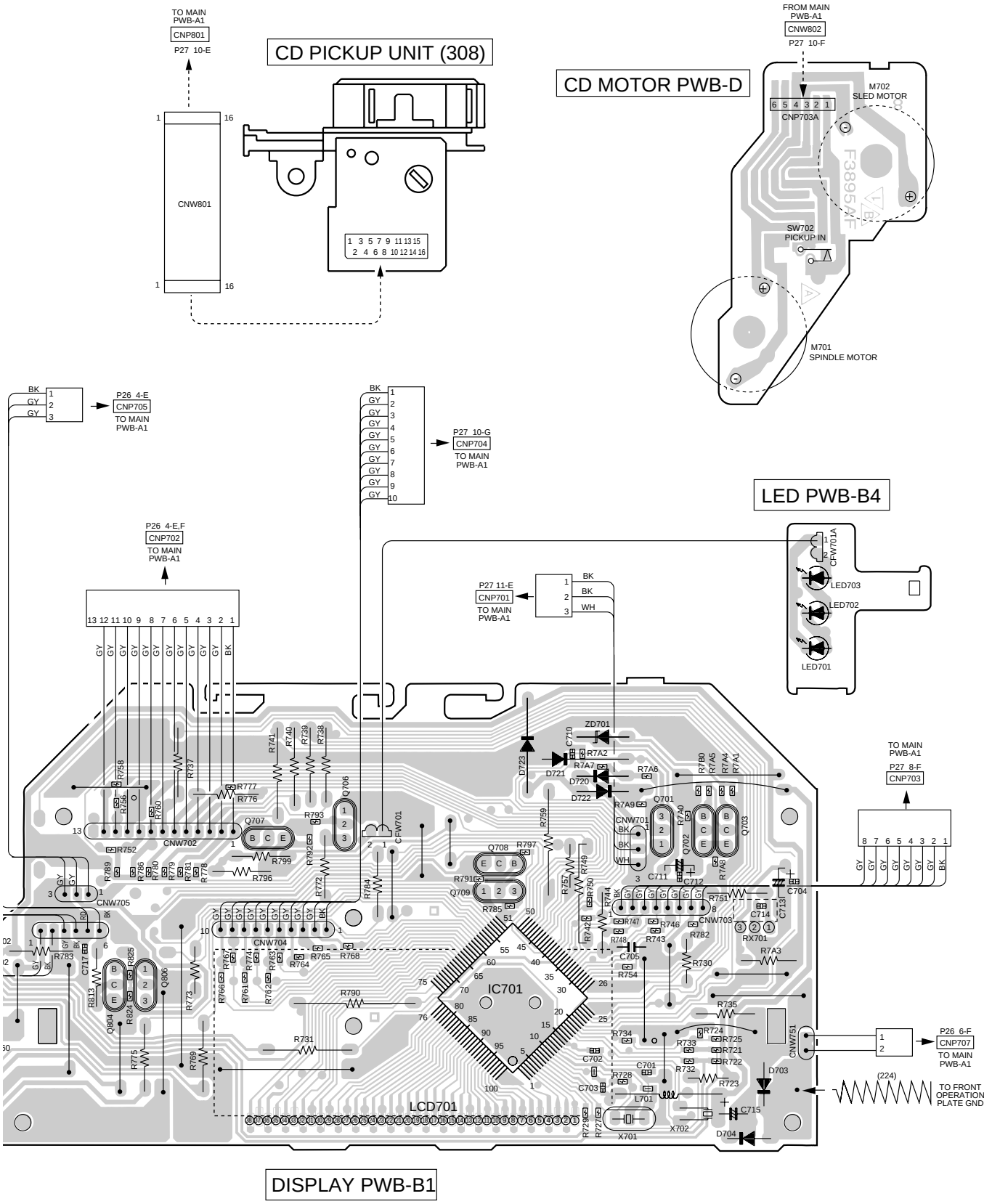
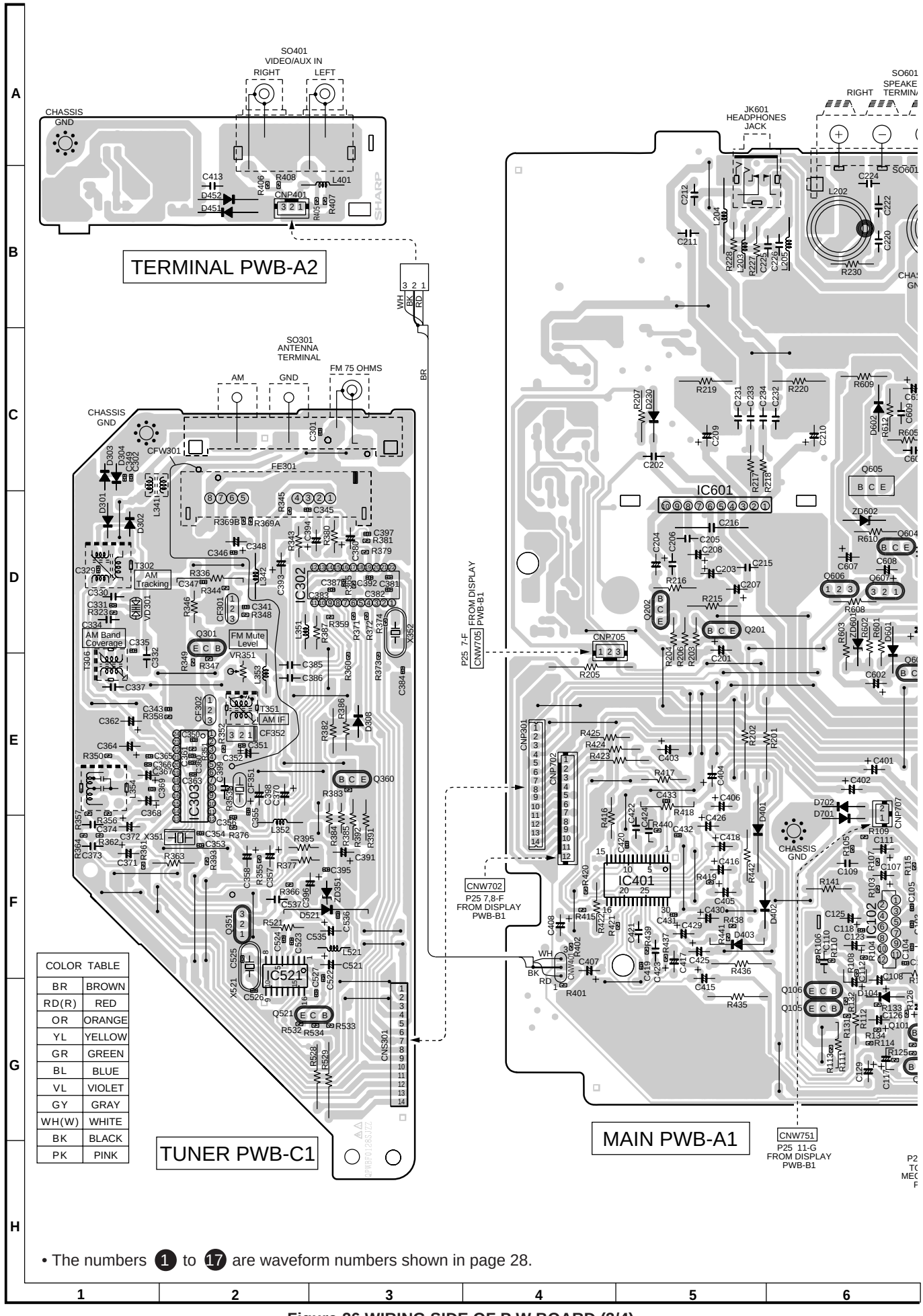


Figure 24 WIRING SIDE OF P.W.BOARD (1/4)



7	8	9	10	11	12

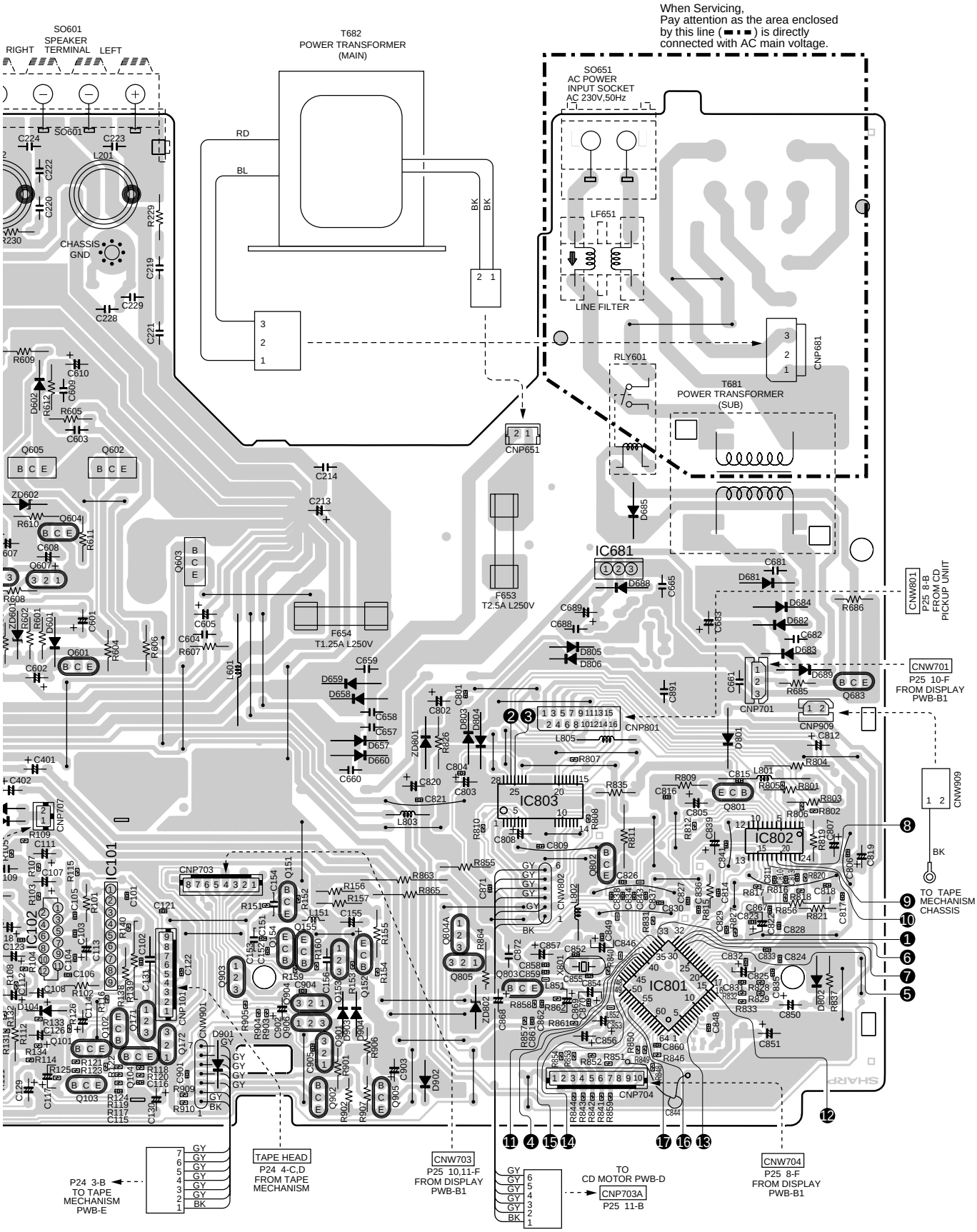
Figure 25 WIRING SIDE OF P.W.BOARD (2/4)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

• The numbers ❶ to ⑰ are waveform numbers shown in page 28.

Figure 26 WIRING SIDE OF P.W.BOARD (3/4)

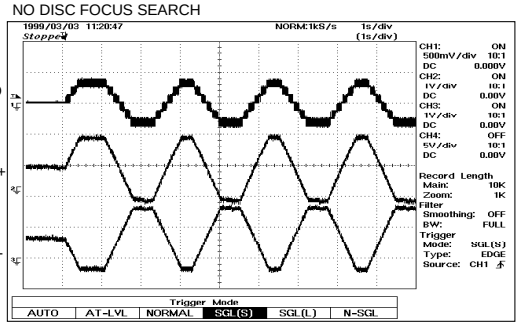


7	8	9	10	11	12

Figure 27 WIRING SIDE OF P.W.BOARD (4/4)

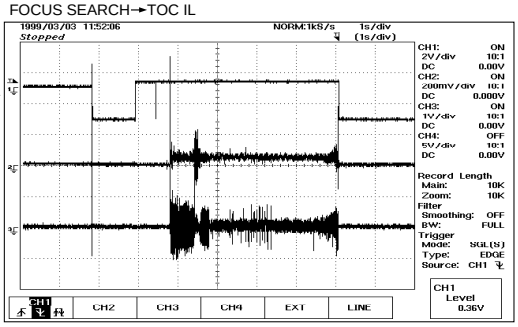
WAVEFORMS OF CD CIRCUIT

NO DISC FOCUS SEARCH



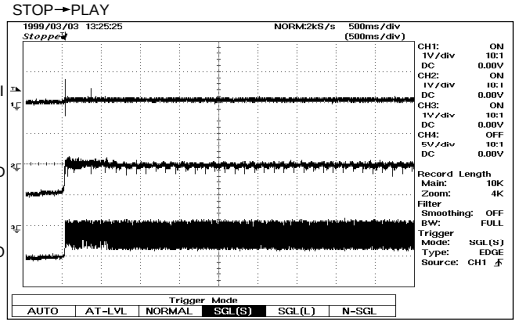
1 FOO IC801 33pin
2 FO+ IC803 26pin
3 FO- IC803 25pin

FOCUS SEARCH→TOC IL



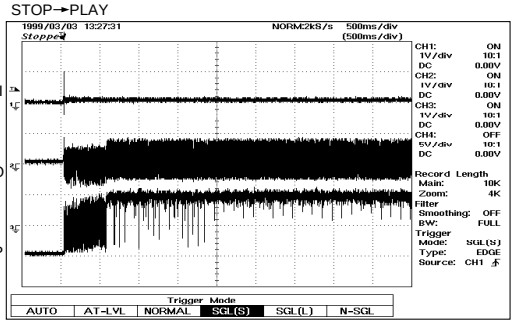
4 SEL IC801 38pin
5 FEI IC801 29pin
6 TEI IC801 31pin

STOP→PLAY



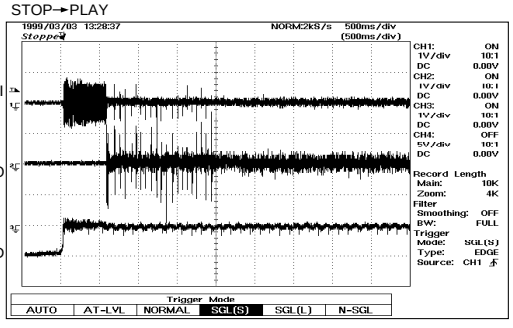
5 FEI IC801 29pin
7 SBAD IC801 30pin
8 RFO IC802 22pin

STOP→PLAY



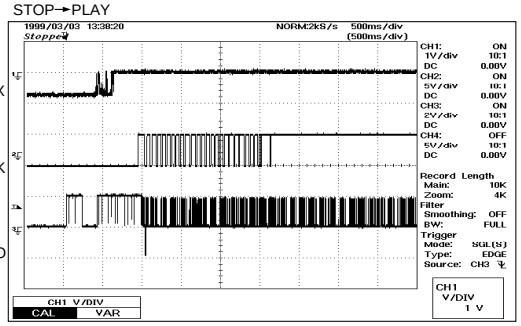
5 FEI IC801 29pin
9 RFGO IC802 19pin
10 RFRP IC802 17pin

STOP→PLAY



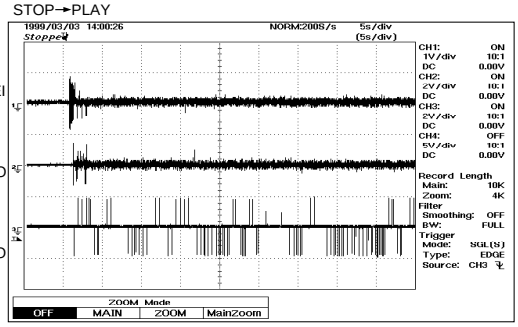
6 TEI IC801 31pin
11 TRO IC801 34pin
7 SBAD IC801 30pin

STOP→PLAY



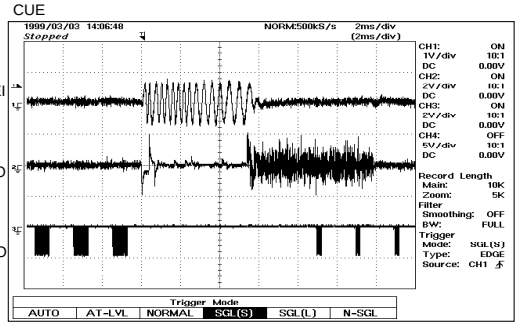
12 TMAX IC801 16pin
13 SBOK IC801 8pin
14 DMO IC801 41pin

STOP→PLAY



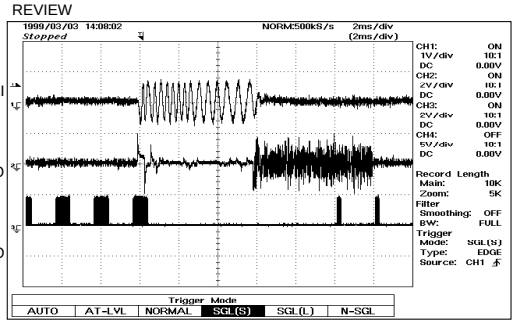
6 TEI IC801 31pin
11 TRO IC801 34pin
15 FMO IC801 40pin

CUE



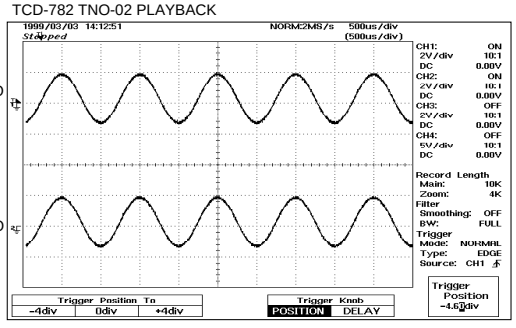
6 TEI IC801 31pin
11 TRO IC801 34pin
15 FMO IC801 40pin

REVIEW



6 TEI IC801 31pin
11 TRO IC801 34pin
15 FMO IC801 40pin

TCD-782 TNO-02 PLAYBACK



16 LO IC801 53pin
17 RO IC801 50pin

TROUBLESHOOTING

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the troubleshooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn off the power, and wipe the lens softly using a cleaning paper moistened with commercially available cleaning solution so as not to damage it.
Be careful not to touch the lens with bare hands.

Dust gradually accumulates on the objective lens during use, and it may degrade performance.
To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has ▲ the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

CAUTION

- The CD lens cleaner should be effective for 30 - 50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD player or on computer CD ROM drives.

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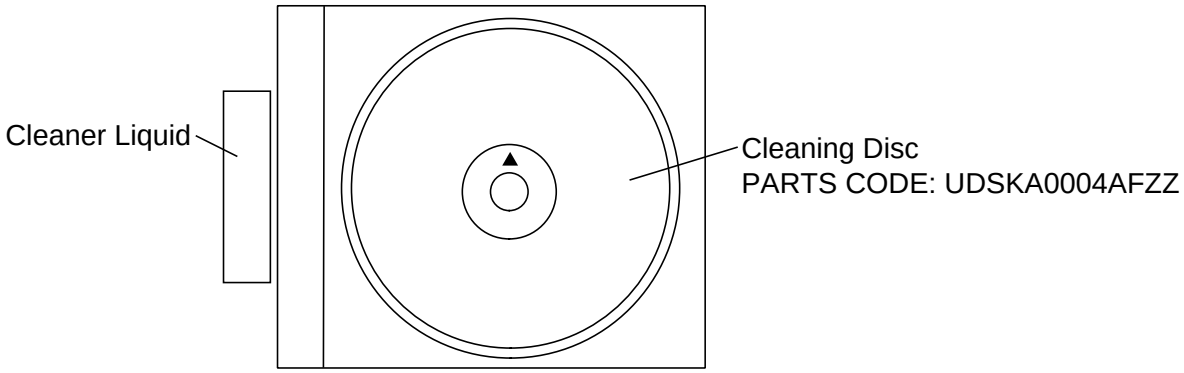
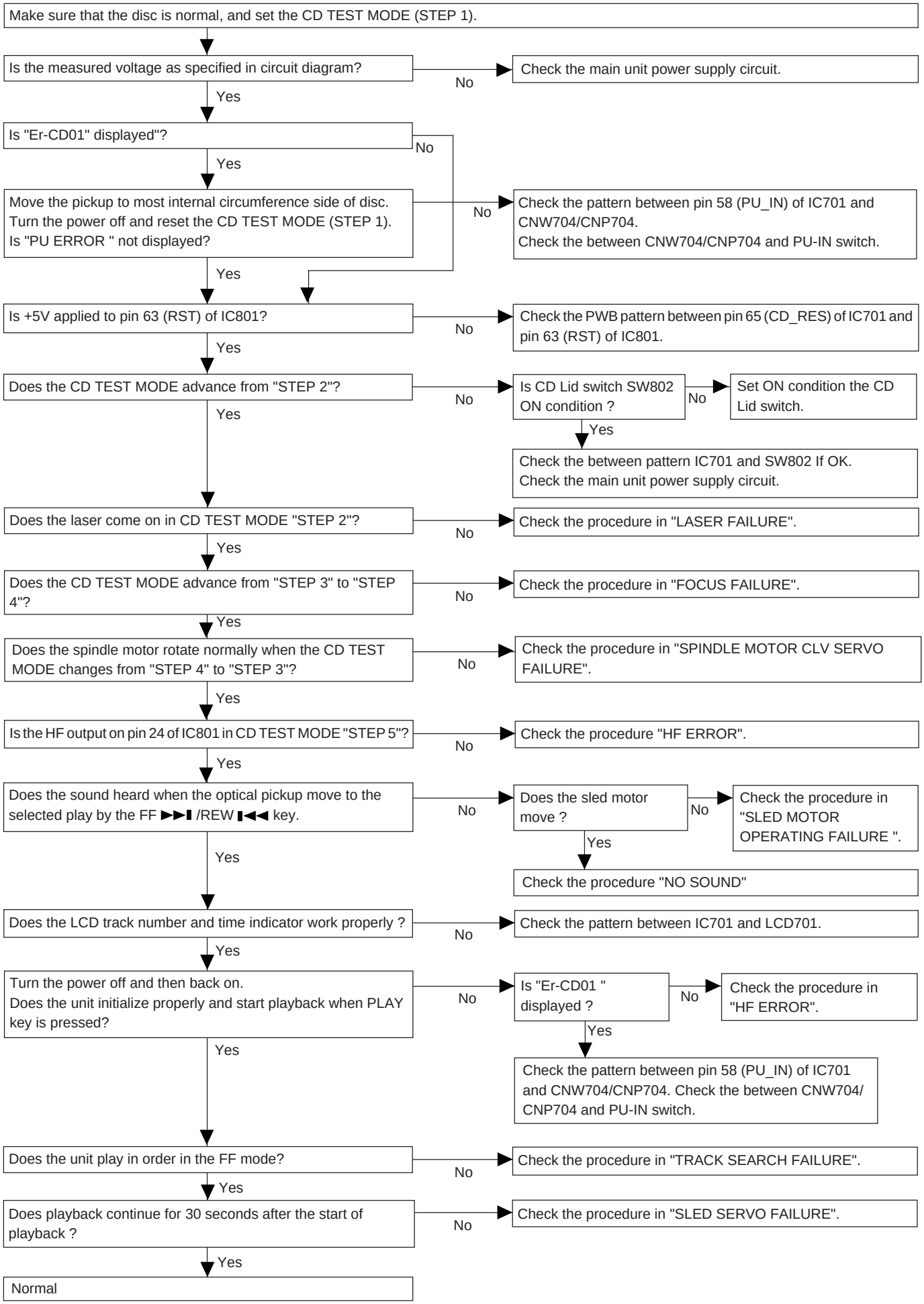



Make sure that the disc is normal, and set the CD TEST MODE (STEP 1).
Is the measured voltage as specified in circuit diagram?
No
Check the main unit power supply circuit.
Yes
Is "Er-CD01" displayed"?
No
Yes
Move the pickup to most internal circumference side of disc.
Turn the power off and reset the CD TEST MODE (STEP 1).
Is "PU ERROR " not displayed?
No
Check the pattern between pin 58 (PU_IN) of IC701 and CNW704/CNP704.
Check the between CNW704/CNP704 and PU-IN switch.
Yes
Is +5V applied to pin 63 (RST) of IC801?
No
Check the PWB pattern between pin 65 (CD_RES) of IC701 and pin 63 (RST) of IC801.
Yes
Does the CD TEST MODE advance from "STEP 2"?
No
Is CD Lid switch SW802 ON condition ?
No
Set ON condition the CD Lid switch.
Yes
Check the between pattern IC701 and SW802 If OK.
Check the main unit power supply circuit.
Yes
Does the laser come on in CD TEST MODE "STEP 2"?
No
Check the procedure in "LASER FAILURE".
Yes
Does the CD TEST MODE advance from "STEP 3" to "STEP 4"?
No
Check the procedure in "FOCUS FAILURE".
Yes
Does the spindle motor rotate normally when the CD TEST MODE changes from "STEP 4" to "STEP 3"?
No
Check the procedure in "SPINDLE MOTOR CLV SERVO FAILURE".
Yes
Is the HF output on pin 24 of IC801 in CD TEST MODE "STEP 5"?
No
Check the procedure "HF ERROR".
Yes
Does the sound heard when the optical pickup move to the selected play by the FF ▶▶▮ /REW ▮◀◀ key.
No
Does the sled motor move ?
No
Check the procedure in "SLED MOTOR OPERATING FAILURE ".
Yes
Check the procedure "NO SOUND"
Yes
Does the LCD track number and time indicator work properly ?
No
Check the pattern between IC701 and LCD701.
Yes
Turn the power off and then back on.
Does the unit initialize properly and start playback when PLAY key is pressed?
No
Is "Er-CD01 " displayed ?
No
Check the procedure in "HF ERROR".
Yes
Check the pattern between pin 58 (PU_IN) of IC701 and CNW704/CNP704. Check the between CNW704/CNP704 and PU-IN switch.
Yes
Does the unit play in order in the FF mode?
No
Check the procedure in "TRACK SEARCH FAILURE".
Yes
Does playback continue for 30 seconds after the start of playback ?
No
Check the procedure in "SLED SERVO FAILURE".
Yes
Normal

• Laser failure.

Is +6.8V applied to the emitter of Q605 ?
- No → Check the PWB pattern between emitter of Q605 and R826.
- Yes ↓

Is +5V applied to the cathode side of ZD801 ?
- No → Check the peripheral parts of ZD801,C820 and C821.
- Yes ↓

Is +5V applied to the pin 64 (VDD) of IC801 ?
- No → Check the PWB pattern between cathode side of ZD801 and pin 64 of IC801.
- Yes ↓

Is +3.3V applied to the pin 1 (VCC) of IC802 ?
- No → Check the PWB pattern between collector of Q802 and pin 1 of IC802.
- Yes ↓

Is 0V applied to the pin 38 (SEL) of IC801 ?
- No → Does the laser come on when pattern cut between pin 8 (SEL) of IC802 and pin 38 (SEL) of IC801 ?
  - Yes → Check the PWB pattern between IC701 and IC801 (BUCK/CCE/BUS0~3)
  - No ↓
- Yes ↓

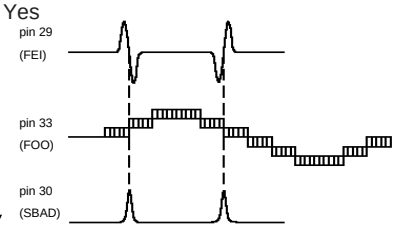
Is approx. 2V applied to the collector of Q801.
- No → Check the peripheral parts of IC802 and Q801. If it is normal, the optical pickup is faulty.
- Yes ↓

Check CNP801/CNW801. If it is normal, the optical pickup is faulty.

• Focus failure.

Does the optical pickup move up and down when the disc is removed?
- No → Check as stated in item "FOCUS SERVO SAWTOOTH WAVE FAILURE".
- Yes ↓

Is the following waveform output at the pin 29 (FEI) of IC801 when the disc is set?
- No → Check the periphery of IC802 and CNP801/CNW801. Is it normal?
  - Yes → The optical pickup is faulty.
- Yes ↓



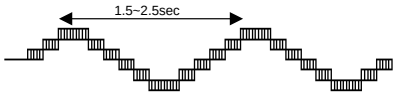
Is the waveform shown above input at the pin 30 (SBAD) of IC801?
- No → Check the pattern between pin 12 of IC802 and pin 30 of IC801. Check the periphery of IC802 and CNP801/CNW801.
- Yes ↓

IC802 is faulty.

• Focus servo sawtooth wave failure.

Is sawtooh wave output to the pin 33 (FOO) of IC801 ?
No → IC801 is faulty.

Yes

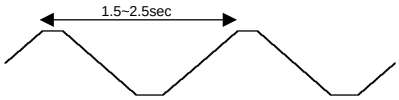


Is +6.8V applied to the pins 21 and 22 (VCC) of IC803 ?
No → Check the PWB pattern between pin emitter of Q605 and IC803.

Yes

Is sawtooth wave obtained between pins 17 and 18 of IC803 ?
No → Is +5V applied to the pin 7 (MUTE) of IC803 ?
No → Check the PWB pattern between pin 7 of IC803 and pin 66 (CD STB) of IC701.
Yes → Check the PWB pattern between pin 33 (FOO) of IC801 and pins 19 and 20 of IC803. If OK. IC803 is faulty.

Yes



Is sawtooth wave obtained between pins 13 and 16 of CNP801/CNW801 ? (as shown above)
No → Check the PWB pattern between CNP801/CNW801 and IC803.

Yes

CNP801/CNW801 connection failure or optical pickup failure.

• Spindle motor clv servo failure.

Is following wave output to the pin 41 (DMO) of IC801 when the CD TEST MODE "STEP 3" is changed to " STEP 4" ?
No → Check the procedure in "HF ERROR". If OK. IC801 is faulty.

Yes

Is above wave obtained between pins 1 and 2 of IC803 ?
No → Check the PWB pattern between pin 41 (DMO) of IC801 and pins 9 and 10 of IC803. If OK. IC803 is faulty.

Yes

Is above wave obtained between pins 9 and 12 of CNP801/ CNW801 ?
No → Check the PWB pattern between CNP801/CNW801 and IC803.

Yes

CNP801/CNW801 connection failure or optical pickup failure.

• HF error.

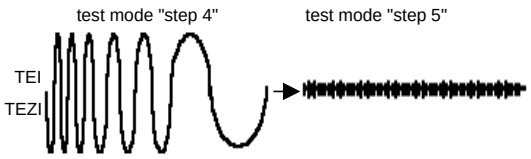
Is output (tracking error signal) obtained at the pins 31 (TEI) and 32 (TEZI) of IC801 the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Is output obtained at the pins 3 and 8 of CNP801/CNW801.

No → Optical pickup failure.

Yes

Yes



Check the periphery of IC802.
Check the PWB pattern between pin 11 (TEO) of IC802 and pins 31 and 32 of IC801.
Is it normal ?

No → IC802 is faulty.

Yes

Check the PWB pattern between pin 34 (TRO) of IC801 and pin 25 of IC803.
Check the periphery of IC803 and CNP801/CNW801.
If OK. Optical pickup failure.

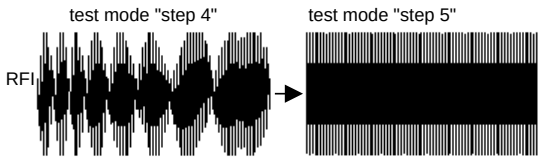
Is output (HF signal) obtained at the pin 24 (RFI) of IC801 when the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Is output obtained at the pins 4 and 5,6 of CNP801/CNW801.

No → Optical pickup failure.

Yes

Yes

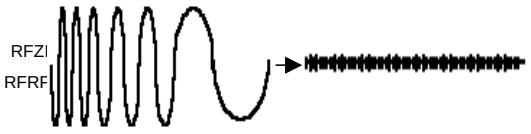


Check the periphery of IC802.
Check the PWB pattern between pin 19 (RFGO) of IC802 and pins 24 (RFI) of IC801.
If OK. IC802 is faulty

Is output (HF signal) obtained at the pins 27 (RFZI) and 28 (RFRP) of IC801 when the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Check the periphery of IC802.
Check the PWB pattern between pin17 (RFRP) of IC802 and pins 27 (RFZI) and 28 (RFRP) of IC801.
If OK. IC802 is faulty.

Yes



Is the following wave output to the pin 41 (DMO) of IC801 when the CD TEST MODE "STEP 4" or "STEP 5"?

No → Check the periphery pins 15~19 of IC801.
If OK. IC801 failure.

Yes

Normal.

• No sound.

No sound from both L and R-ch?

No → Check the interval between the pins 50 or 53 of IC801 and the pins 1 or 10 of IC601.

Yes

Is +3.3V applied to pin 51 (DVDD) of IC801?

No → Check the PWB pattern between pin 51 of IC801 and Q803.

Yes

Is signal of pins 50 and 53 of IC801 output?

No → Check the peripheral parts of IC801. If OK, IC801 is faulty.

Yes

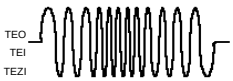
The main PWB is faulty.

• Track search failure

Does the sled motor run in FF/REW state when the SERVO TEST MODE "STEP1" is set?
- No → Check as stated in item "SLED MOTOR OPERATION FAILURE".
- Yes ↓

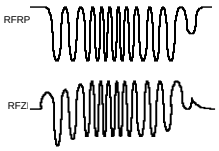
Is the following wave output to the pin 34 (TRO) of IC801 during track search in normal playback?
- No → IC801 failure.
- Yes ↓

Is the following wave output to the pins 11 (TEO) of IC802 during track search in normal playback?
- No → Check the PWB pattern between pin 34 (TRO) of IC801 and pin 25 of IC803. Check the PWB pattern between pins 26 and 27 of IC803 and Optical pickup. If OK. Optical pickup failure.
- Yes ↓



Is the above wave output to the pins 31 (TEI) and 32 (TEZI) of IC801 during track search in normal playback?
- No → Check the PWB pattern between pin 11 (TEO) of IC802 and pins 31 and 32 of IC801. If OK. IC802 failure.
- Yes ↓

Is the following wave output to the pin 27 (RFZI) and 28 (RFRP) of IC801 during track search in normal playback?
- No → Check the PWB pattern between pins 22 (RFO),17 (RFRP), 19 (RFGO) and 20 (RFGC) of IC802 and pins 24,27,28 and 36 of IC801. If OK. IC802 failure.
- Yes ↓

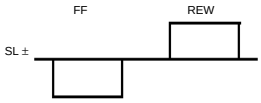


Normal.

• Sled motor operation failure.

Is following sled feed signal output the pin 40 (FMO) of IC801 when FF ▶▶▮ /REW ▮◀◀ key is pressed after the CD TEST MODE "STEP 1" is set?
- No → C801 is faulty.
- Yes ↓

Is following sled feed signal output the pins 3 and 4 of IC803 when FF ▶▶▮ /REW ▮◀◀ key is pressed after the CD TEST MODE "STEP 1" is set?
- No → Check the PWB pattern between pin 40 of IC801 and pins 3 and 4 of IC803.
- Yes ↓



Is sled feed signal output the pins 1 and 2 of IC803?
- No → Check the peripheral parts of IC803. If OK, IC803 is faulty.
- Yes ↓

Is sled feed voltage applied between both terminals of sled motor?
- No → Check the CNW802.
- Yes ↓

Check the CD mechanism (periphery of sled motor). If the sled motor does not run when DC2.0V is applied to both terminals of sled motor, the sled motor is faulty.

• Sled servo failure.

Is following sled signal output the pin 40 (FMO) of IC801 during playback?
- No → IC801 is faulty.
- Yes ↓

Normal.

SHARP PARTS GUIDE

COMPACT AUDIO SYSTEM

MODEL XL-T200H

XL-T200H Compact Audio System consisting of XL-T200H (main unit) and CP-XLT200H (speaker system).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK ..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN ..... Cylindrical type (without lead wire)
VC • • TV ..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS ..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN ..... Cylindrical type (without lead wire)
VR • • TV ..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

NO.	PART CODE	★	PRICE RANK	DESCRIPTION

INTEGRATED CIRCUITS

IC101	VHIBA3126N/-1	J	AF	Head Selector,BA3126N
IC102	VHIBA3311L/-1	J	AK	REC./P.B.Equaliser Amp., BA3311L
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC401	VHILC75342M-1	J	AN	Function/Volume Equaliser, LC75342M
IC521	VHILC72723M-1	J	AS	RDS,LC72723M
IC601	VHILA4600//-1	J	AN	Power Amp.,LA4600
IC681	VHIAN78L05/-1	J	AE	Constant Voltage Regulator, AN78L05
IC701	RH-IX0045SJZZ	J	AX	System Microcomputer/FL Driver, IX0045SJ
IC801	VHITC94A14F-1	J	AY	Servo/Signal Control,TC94A14F
IC802	VHITA2157F/-1	J	AN	Head Amp.,TA2157F
IC803	VHIMM1469PH-1	J	AN	Focus/Tracking/Spin/Sled Driver, MM1469PH
IC804	VHITA7291S/-1	J	AH	CD LID Motor Driver,TA7291S

TRANSISTORS

Q101~106	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q151	VS2SC2001-K-1	J	AD	Silicon,NPN,2SC2001 K
Q152	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q153	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q154,155	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q171	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q172	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q201,202	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q301	VS2SC380-O/-1	J	AC	Silicon,NPN,2SC380 O
Q351	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q521	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q601	VSKTC3200GR-1	J	AC	Silicon,NPN,KTC3200 GR
Q602,603	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y
Q604	VSKTC3200GR-1	J	AC	Silicon,NPN,KTC3200 GR
Q605	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y
Q606	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q607	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q683	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q701	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q702,703	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q706	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q707,708	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q709	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q801	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q802	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q803	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q804	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q804A	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q805	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q806,807	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q901	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q902	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q903	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q904	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q905	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q906	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M

DIODES

D104	VHD1N4148//-1	J	AA	Silicon,1N4148
D230	VHD1N4148//-1	J	AA	Silicon,1N4148
D301~304	VHD1N4148//-1	J	AA	Silicon,1N4148
D308	VHD1N4148//-1	J	AA	Silicon,1N4148
D401~403	VHD1N4004//-1	J	AB	Silicon,1N4004
D451,452	VHD1N4148//-1	J	AA	Silicon,1N4148
D521	VHD1N4148//-1	J	AA	Silicon,1N4148
D601,602	VHD1N4148//-1	J	AA	Silicon,1N4148
⚠ D657~660	VHD1N4004//-1	J	AB	Silicon,1N4004
⚠ D681~684	VHD1N4004//-1	J	AB	Silicon,1N4004
D685	VHD1N4004//-1	J	AB	Silicon,1N4004
D688,689	VHD1N4004//-1	J	AB	Silicon,1N4004
D701~704	VHD1N4148//-1	J	AA	Silicon,1N4148
D720~723	VHD1N4148//-1	J	AA	Silicon,1N4148
D801~806	VHD1N4148//-1	J	AA	Silicon,1N4148
D901~904	VHD1N4148//-1	J	AA	Silicon,1N4148

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
LED701~703	VHPSLI343YC-1	J	AF	LED,SLI343YC
LED801	VHPAUY3335+-1	J		LED,AUY3335
VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
ZD351	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
ZD601	VHEDZ130BSA-1	J	AC	Zener,13V,DZ130BSA
ZD602	VHEDZ8R2BSC-1	J	AB	Zener,8.2V,DZ8.2BSC
ZD701	VHEDZ3R3BSB-1	J	AB	Zener,3.3V,DZ3.3BSB
ZD801	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
ZD802	VHEDZ3R9BSB-1	J	AC	Zener,3.9V,DZ3.9BSB

FILTERS

CF301,302	RFILF0072AFZZ	J	AG	FM IF
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0003SJZZ	J	AF	AM IF

TRANSFORMERS

T302	RCILA0007SJZZ	J	AG	AM Antenna
T306	RCILB0009SJZZ	J	AG	AM OSC.
T351	RCILI0004SJZZ	J	AF	AM IF
⚠ T681	RTRNP0057SJZZ	J	AL	Power Transformer (Sub)
⚠ T682	RTRNP0092SJZZ	J		Power Transformer (Main)

COILS

L151	VP-MK331K0000	J	AB	330 µH,Choke
L201,202	RCILZ0024AWZZ	J	AC	3 µH,Choke
L203~205	VP-DH100K0000	J	AB	10 µH,Choke
L341	RBLN-0001AWZZ	J	AD	Balun
L342	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L351,352	VP-DH101K0000	J	AB	100 µH,Choke
L353	VP-DH102K0000	J	AB	1 mH,Choke
L354	RFILL0001AWZZ	J	AE	Low Pass Filter
L401	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L521	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L601	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L701,702	VP-DH100K0000	J	AB	10 µH,Choke
L801~803	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L805	VP-XH2R2K0000	J	AB	2.2 µH,Choke
L851,852	RCILC0353AFZZ	J	AB	Tip Solid Induction,100mA
⚠ LF651	RCILZ0005SJZZ	J		Line Filter

VARIABLE RESISTOR

VR351	RVR-M0026AWZZ	J	AC	10 kohm (B),Semi-VR

VIBRATORS

X351	RCRM-0007SJZZ	J	AG	VCO,456 kHz
X352	RCRSP0006SJZZ	J	AF	Crystal,4.5 MHz
X521	RCRSP0005SJZZ	J	AF	Crystal,4.332 MHz
X701	RCRM-0008SJZZ	J	AG	Ceramic,8 MHz
X702	RCRSP0007SJZZ	J	AE	Crystal,32.768 kHz
X801	RCRSP0002SJZZ	J	AL	Crystal,16.93 MHz

CAPACITORS

C101,102	VCKYCY1HB102K	J	AA	0.001 µF,50V
C103,104	VCKYCY1HB331K	J	AA	330 pF,50V
C105,106	VCKYCY1HB271K	J	AA	270 pF,50V
C107,108	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C109,110	VCQYKA1HM153J	J	AB	0.015 µF,50V,Mylar
C111,112	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C113,114	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C115,116	VCKYCY1HB222K	J	AA	0.0022 µF,50V
C117	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C118	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C121,122	VCCSCY1HL820J	J		82 pF,50V
C123	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C125	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C126	RC-GZA226AF1C	J	AB	22 µF,16V,Electrolytic
C129	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C130	RC-EZD475AF1E	J	AB	4.7 µF,25V,Electrolytic
C131	VCKYBT1HB821K	J	AA	820 pF,50V
C151	VCKYCY1HB181K	J	AB	180 pF,50V
C152	VCKYCY1HB102K	J	AA	0.001 µF,50V
C153	VCQPKA2AA392J	J	AB	0.0039 µF,100V,Polypropylene
C154	VCQYKA1HM273J	J	AB	0.027 µF,50V,Mylar

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
C155	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C156	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C201	RC-EZD336AF1C	J	AB	33 µF,16V,Electrolytic
C202	VCKYPA1HB332K	J	AA	0.0033 µF,50V
C203	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C204	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C205	VCKYPA1HB102K	J	AA	0.001 µF,50V
C206	VCKYPA1HB102K	J	AA	0.001 µF,50V
C207	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C208	RC-GZA226AF1E	J	AB	22 µF,25V,Electrolytic
C209	RC-GZV108AF1E	J	AD	1000 µF,25V,Electrolytic
C210	RC-GZV108AF1E	J	AD	1000 µF,25V,Electrolytic
C211	VCKYPA1HB331K	J	AA	330 pF,50V
C212	VCKYPA1HB331K	J	AA	330 pF,50V
C213	RC-GZW478AF1E	J	AG	4700 µF,25V,Electrolytic
C214	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C215	VCKYPA1HB102K	J	AA	0.001 µF,50V
C216	VCKYBT1HB821K	J	AA	820 pF,50V
C219~222	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C223,224	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C225,226	VCKYPA1HB821K	J	AA	820 pF,50V
C228	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C229	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C231	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C232	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C233,234	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C301	VCKYCY1EF123Z	J		0.012 µF,25V
C302	VCKYCY1HB102K	J	AA	0.001 µF,50V
C329	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C330	VCCCPA1HH8R0D	J	AA	8 pF (CH),50V
C331	VCKYCY1EF473Z	J	AB	0.047 µF,25V
C332	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C334	VCCUPA1HJ270J	J	AA	27 pF (UJ),50V
C335	VCKYCY1HB561K	J	AA	560 pF,50V
C337	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C341	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C343	VCCSCY1HL330J	J	AD	33 pF,50V
C345~347	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C348	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C349	VCKYCY1HB102K	J	AA	0.001 µF,50V
C350,351	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C352	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C353,354	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C355	VCCSCY1HL220J	J	AD	220 pF,50V
C356	VCKYCY1HB102K	J	AA	0.001 µF,50V
C357	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C358	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C360,361	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C362	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C363	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C364	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C365	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C366	VCKYCY1HB102K	J	AA	0.001 µF,50V
C367,368	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C369	VCCSCY1HL560J	J	AD	56 pF,50V
C370	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C371,372	RC-EZD105AF1H	J	AB	1 µF,50V,Electrolytic
C373,374	VCTYPA1CX273K	J	AA	0.027 µF,16V
C380	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C381	VCCCCY1HH120J	J	AA	12 pF (CH),50V
C382	VCCCCY1HH150J	J	AA	15 pF (CH),50V
C383	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C384	VCKYCY1HB102K	J	AA	0.001 µF,50V
C385	VCKYPA1HF103Z	J	AB	0.01 µF,50V
C386	VCKYPA1HB331K	J	AA	330 pF,50V
C387	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C391	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C392	VCKYCY1HB102K	J	AA	0.001 µF,50V
C393	RC-EZD105AF1H	J	AB	1 µF,50V,Electrolytic
C394	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C395	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C396	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C397	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C398	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C399	VCKYPA1HF473Z	J	AB	0.047 µF,50V
C401,402	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C403	RC-EZD106AF1C	J	AB	10 µF,16V,Electrolytic
C404~408	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C413	VCKYPA1HB472K	J	AB	0.0047 µF,50V
C415	RC-EZD106AF1C	J	AB	10 µF,16V,Electrolytic
C416	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C417	RC-EZD225AF1H	J	AB	2.2 µF,50V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C418	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C419,420	VCKYCY1HB272K	J	AA	0.0027 µF,50V
C421~424	RC-QZA104AFYJ	J	AC	0.1 µF,50V,Mylar
C425	RC-EZD106AF1H	J	AB	10 µF,50V,Electrolytic
C426	RC-GZA106AF1H	J	AB	10 µF,50V,Electrolytic
C429	RC-EZD336AF1C	J	AB	33 µF,16V,Electrolytic
C430	RC-EZD107AF1C	J	AC	100 µF,16V,Electrolytic
C431~433	VCKYCY1HB221K	J	AA	220 pF,50V
C521	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C522	VCKYCY1HB331K	J	AA	330 pF,50V
C523	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C524	VCKYCY1HB561K	J	AA	560 pF,50V
C525,526	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C527	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C535	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C536	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C537	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C601	RC-GZV477AF1E	J	AC	470 µF,25V,Electrolytic
C602	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C603,604	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C605	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C607	RC-GZV477AF1E	J	AC	470 µF,25V,Electrolytic
C608	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C609	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C610	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
⚠ C657~660	VCFYFA1HA104J	J	AC	0.1 µF,50V,Thin Film
C661	VCKYPA1HB102K	J	AA	0.001 µF,50V
C665	VCFYFA1HA473J	J	AB	0.047 µF,50V,Thin Film
C681,682	VCFYFA1HA473J	J	AB	0.047 µF,50V,Thin Film
C683	RC-GZV228AF1C	J	AG	2200 µF,16V,Electrolytic
C688	VCFYFA1HA473J	J	AB	0.047 µF,50V,Thin Film
C689	RC-GZA474AF1H	J	AA	0.47 µF,50V,Electrolytic
C701,702	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C703	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C704	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C705	VCKYPA1HF103Z	J	AB	0.01 µF,50V
C710	VCKYCY1EB103K	J	AA	0.01 µF,25V
C711	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C712	VCKYCY1EB103K	J	AA	0.01 µF,25V
C713	RC-EZD106AF1C	J	AB	10 µF,16V,Electrolytic
C714	VCKYCY1HB561K	J	AA	560 pF,50V
C715	RC-EZD107AF1A	J	AB	100 µF,10V,Electrolytic
C717	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C801	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C802	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C803	RC-GZA337AF1A	J	AB	330 µF,10V,Electrolytic
C804	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C805	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C806	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C807,808	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C809	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C810,811	VCKYCY1CB104K	J	AB	0.1 µF,16V
C812	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C813	VCCCCY1HH1R5C	J	AA	1.5 pF (CH),50V
C814	VCKYCY1HB682K	J	AA	0.0068 µF,50V
C815,816	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C817	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C818	VCKYCY1HF104Z	J	AB	0.1 µF,50V
C819,820	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C821	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C822	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C823,824	VCKYCY1HF104Z	J	AB	0.1 µF,50V
C825	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C826	VCKYCY1CB473K	J	AA	0.047 µF,16V
C827	VCCCCY1HH471J	J	AA	470 pF (CH),50V
C828	VCKYCY1HB103K	J	AA	0.01 µF,50V
C829	VCKYCY1EB333K	J	AC	0.033 µF,25V
C830	VCCCCY1HH471J	J	AA	470 pF (CH),50V
C831	VCKYCY1HB153K	J	AA	0.015 µF,50V
C832	VCKYCY1HB103K	J	AA	0.01 µF,50V
C833	VCKYCY1HB272K	J	AA	0.0027 µF,50V
C834	VCKYCY1CB473K	J	AA	0.047 µF,16V
C835	VCCCCY1HH470J	J	AA	47 pF (CH),50V
C836	VCKYCY1EB333K	J	AC	0.033 µF,25V
C837,838	VCKYCY1CB473K	J	AA	0.047 µF,16V
C839	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C840	VCKYCY1EB104K	J	AD	0.1 µF,25V
C841	VCKYCY1HF104Z	J	AB	0.1 µF,50V
C843	VCKYCY1CB473K	J	AA	0.047 µF,16V
C844	VCKYPA1HB101K	J	AA	100 pF,50V
C845	RC-EZD476AF1C	J	AC	47 µF,16V,Electrolytic
C846	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic

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C848,849	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C850,851	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C852	VCCCCY1HH150J	J	AA	15 pF (CH),50V
C853,854	RC-GZA106AF1A	J	AC	10 µF,10V,Electrolytic
C855	VCCCCY1HH120J	J	AA	12 pF (CH),50V
C856,857	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C858,859	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C860	VCKYCY1HF104Z	J	AB	0.1 µF,50V
C861,862	VCKYCY1HB471K	J	AA	470 pF,50V
C867	VCKYCY1CB104K	J	AB	0.1 µF,16V
C868,869	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C870	VCKYCY1HF223Z	J		0.022 µF,50V
C871	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C872	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C891	VCKYPA1HB152K	J	AA	0.0015 µF,50V
C901	VCKYCY1HB102K	J	AA	0.001 µF,50V
C902	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C903	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C904,905	VCKYCY1HF223Z	J		0.022 µF,50V

RESISTORS

	VRS-CY1JB000J	J	AA	0 ohm,Jumper,0.8×1.55mm,Green
R7A0,7A1	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R7A2	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R7A3	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R7A4	VRS-CY1JB121J	J	AA	120 ohms,1/16W
R7A5	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R7A6,7A7	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R7A8	VRS-CY1JB820J	J	AA	82 ohms,1/16W
R7A9	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R7B0	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R101,102	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R103,104	VRS-CY1JB121J	J	AA	120 ohms,1/16W
R105,106	VRS-CY1JB154J	J	AA	150 kohms,1/16W
R107,108	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R109,110	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R111,112	VRD-ST2EE222J	J	AA	2.2 kohms,1/4W
R113,114	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R115,116	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R117,118	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R119,120	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R121~124	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R125	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R126	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R131,132	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R133	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R134	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R138	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R139	VRD-ST2EE272J	J	AA	2.7 kohms,1/4W
R140	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R141	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R151	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R152	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R153,154	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R155	VRD-ST2EE560J	J	AA	56 ohms,1/4W
R156,157	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R159,160	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R201,202	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R203,204	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R205	VRD-ST2EE332J	J	AA	3.3 kohms,1/4W
R206	VRD-ST2EE682J	J	AA	6.8 kohms,1/4W
R207	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R215,216	VRD-ST2EE682J	J	AA	6.8 kohms,1/4W
R217,218	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R219,220	VRS-VV3AAR20J	J	AB	0.2 ohms,1W
R227,228	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R229,230	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R323	VRS-CY1JB683J	J	AA	68 kohms,1/16W
R336	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R343	VRD-ST2CD181J	J	AA	180 ohms,1/6W
R344	VRS-CY1JB681J	J	AA	680 ohms,1/16W
R345	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R346	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R347	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R348	VRS-CY1JB681J	J	AA	680 ohms,1/16W
R349	VRS-CY1JB330J	J	AA	33 ohms,1/16W
R350	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R351	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R352	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R353	VRS-CY1JB271J	J	AA	270 ohms,1/16W
R355	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R356	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R357	VRS-CY1JB474J	J	AA	470 kohms,1/16W
R358	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R359	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R360	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R361,362	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R363	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R364	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R365	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R366	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R369A	VRS-CY1JB680J	J	AA	68 ohms,1/16W
R369B	VRS-CY1JB820J	J	AA	82 ohms,1/16W
R371~374	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R376	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R377	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R379	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R380	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R381	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R382	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R383	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R384	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R385	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R386	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R391,392	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R393	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R395	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R401,402	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R405,406	VRS-CY1JB273J	J	AA	27 kohms,1/16W
R407,408	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R415	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R416~418	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R419~421	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R422~425	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R435	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R436	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R437,438	VRS-CY1JB682J	J	AA	6.8 kohms,1/16W
R439,440	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R441	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R442	VRD-ST2EE103J	J	AA	10 kohm,1/4W
R521	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R528,529	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R532	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R533,534	VRS-CY1JB563J	J	AA	56 kohms,1/16W
R601	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R602	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R603	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R604	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R605	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R606	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R607	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R608	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R609	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R610	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R611	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R612	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R685	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R686	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R702	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R705	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R706	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R707	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R708	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R709	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R710	VRS-CY1JB122J	J	AA	1.2 kohms,1/16W
R711	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R720	VRS-CY1JB122J	J	AA	1.2 kohms,1/16W
R721,722	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R723	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R724	VRS-CY1JB123J	J	AA	12 kohms,1/16W
R725	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R727	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R728	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R729	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R730,731	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R732~734	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R735	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R737~741	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R742,743	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R744	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R746~748	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R749	VRD-ST2CD102J	J	AA	1 kohm,1/6W

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R750	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R751	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R752	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R754	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R756	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R757	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R758	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R759	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R760~768	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R769	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R772,773	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R774	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R775,776	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R777	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R778~781	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R782	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R783	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R784	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R785	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R786	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R789	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R790	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R791	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R792	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R793	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R795	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R796	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R797	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R799	VRD-ST2EE271J	J	AA	270 ohms,1/4W
R801	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R802	VRS-CY1JB823J	J	AA	82 kohms,1/16W
R803	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R804	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R805,806	VRS-CY1JB823J	J	AA	82 kohms,1/16W
R807,808	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R809	VRD-ST2EE100J	J	AA	10 ohm,1/4W
R810	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R811	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W
R812	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R813	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R815	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R816	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R817	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R818	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R819	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R820	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R821	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R824	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R825	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R826	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R827	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R828	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R829	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R831	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R832	VRS-CY1JB154J	J	AA	150 kohms,1/16W
R833	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R834	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R835	VRD-ST2CD394J	J	AA	390 kohms,1/6W
R836	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R837	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R838	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R840	VRS-CY1JB105J	J	AA	1 Mohm,1/16W
R841~844	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R845	VRS-CY1JB154J	J	AA	150 kohms,1/16W
R846	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R847	VRS-CY1JB683J	J	AA	68 kohms,1/16W
R848~854	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R855,856	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R857,858	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R859	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R860	VRD-ST2EE820J	J	AA	82 ohms,1/4W
R861,862	VRS-CY1JB103J	J	AA	10 kohm,1/16W
⚠ R863	VRG-ST2EM100J	J	AC	10 ohm,1/4W,Fusible
R864	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R865	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R901	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R902	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R903	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R904	VRS-CY1JB271J	J	AA	270 ohms,1/16W
R905	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R906	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R907	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R909	VRS-CY1JB183J	J	AA	18 kohms,1/16W
R910	VRS-CY1JB333J	J	AA	33 kohms,1/16W

OTHER CIRCUITRY PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CFW301	QCNWN0450SJZZ	J		Lead Wire,1Pin
CFW701/A	QCNWN0427SJZZ	J		Flat Wire,2Pin
CFW706A/B	QCNWN0429SJZZ	J		Flat Wire,5Pin
CNP101	QCNCM931HAFZZ	J	AC	Plug,9Pin
CNP301	QCNCM010PAWZZ	J	AD	Plug,14Pin
CNP401	QCNCM999CAFZZ	J	AG	Plug,3Pin
CNP651	QCNCM045BSJZZ	J		Plug,2Pin
⚠ CNP681	QCNCM017BSJZZ	J	AD	Plug,5Pin
CNP701	QCNCM998CAFZZ	J	AE	Plug,3Pin
CNP702	QCNCM999MAFZZ	J	AC	Plug,12Pin
CNP703	QCNCM999HAFZZ	J	AD	Plug,8Pin
CNP703A	QCNCM035FSJZZ	J	AD	Plug,6Pin
CNP704	QCNCM999KAFZZ	J		Plug,10Pin
CNP705	QCNCM999CAFZZ	J	AG	Plug,3Pin
CNP707	QCNCM999BAFZZ	J	AD	Plug,2Pin
CNP801	QCNCW011RSJZZ	J		Plug,16Pin
CNP902C	QCNCM998BAFZZ	J	AC	Plug,2Pin
CNP909	QCNCM998BAFZZ	J	AC	Plug,2Pin
CNS301	QCNCW010PAWZZ	J	AE	Socket,14Pin
CNW101	QCNWN0175SJZZ	J	AG	Connector Ass'y,9Pin
CNW401	QCNWN0417SJZZ	J		Connector Ass'y,3-3Pin
CNW701	QCNWN0421SJZZ	J		Connector Ass'y,3-3Pin
CNW702	QCNWN0454SJZZ	J		Connector Ass'y,12-12Pin
CNW703	QCNWN0423SJZZ	J		Connector Ass'y,8-8Pin
CNW704	QCNWN0424SJZZ	J		Connector Ass'y,10-10Pin
CNW705	QCNWN0453SJZZ	J		Connector Ass'y,3-3Pin
CNW751	QCNWN0459SJZZ	J		Connector Ass'y,2-2Pin
CNW801	QCNWN0420SJZZ	J		Flat Cable,16Pin
CNW802	QCNWN0419SJZZ	J		Connector Ass'y,6-6Pin
CNW901	QCNWN0418SJZZ	J		Connector Ass'y,7-7Pin
CNW902/A/B	QCNWN0426SJZZ	J		Connector Ass'y,6-2-2-2Pin
CNW909	QCNWN0435SJZZ	J		Flat Cable,2Pin with Lug
⚠ F653	QFS-D132CAWNI	J		Fuse,T2.5A L 250V
⚠ F654	QFS-D252CAWNI	J	AC	Fuse,T1.25A L 250V
FE301	RTUNS0016AWZZ	J	AX	FM Front End
JK601	QJAKM0001SJZZ	J	AG	Jack,Headphone
LCD701	RV-LX0016SJZZ	J	AS	FL Display
M701	RMOTV0408SJM4	J	AQ	Motor with Chassis [Spindle]
M702	RMOTV0409AFM1	J	AN	Motor with Gear [Sled]
M801(243-6)	RMOTV0004SJZZ	J	AL	Motor [CD Lid]
M901(212-9)	9GD192112344	J	AY	Motor with Pulley [Tape]
⚠ RLY601	RRLYD0004SJZZ	J	AG	Relay
RX701	VHLN61V380A-1	J	AN	Remote Sensor
SO301	QTANC9003SJZZ	J	AF	Terminal,Antenna
SO401	QSOCJ0003SJZZ	J	AG	Socket,Video/AUX Input
SO601	QTANA0007SJZZ	J	AF	Terminal,Speaker
⚠ SO651	QSOCA0212AWZZ	J	AD	Socket AC Input
SOL901(212-4)	9GD19212118	J	AP	Solenoid Ass'y
SW702	QSW-F9001AWZZ	J	AE	Switch,Push Type [Pickup In]
SW709	QSW-K0004SJZZ	J	AD	Switch,Key Type [On/Stand-By]
SW710	QSW-K0004SJZZ	J	AD	Switch,Key Type [CD Lid Open/Close]
SW711	QSW-K0004SJZZ	J	AD	Switch,Key Type [Volume Down]
SW712	QSW-K0004SJZZ	J	AD	Switch,Key Type [Volume Up]
SW721	QSW-K0004SJZZ	J	AD	Switch,Key Type [Function]
SW722	QSW-K0004SJZZ	J	AD	Switch,Key Type [REW/Preset Down]
SW723	QSW-K0004SJZZ	J	AD	Switch,Key Type [FF/Preset Up]
SW724	QSW-K0004SJZZ	J	AD	Switch,Key Type [Bass/Treble]
SW725	QSW-K0004SJZZ	J	AD	Switch,Key Type [CD Stop/Clear/Tuning Down]
SW726	QSW-K0004SJZZ	J	AD	Switch,Key Type [Memory/Set]
SW727	QSW-K0004SJZZ	J	AD	Switch,Key Type [CD Play/Pause/Tuning Up]
SW728	QSW-K0004SJZZ	J	AD	Switch,Key Type [Rec/Pause]
SW802	QSW-B0001SJZZ	J	AG	Switch,Lever Type [CD Lid]
SW901(212-7)	9GD640101210	J	AE	Switch,Leaf Type [Fool Proof]
SW902(212-8)	9GD640101210	J	AE	Switch,Leaf Type [Cam]

CD MECHANISM PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
301	MLEVP1054AFZZ	J	AC	Rail,Guide
302	NGERH0586AFZZ	J	AC	Gear,Middle
303	NGERH0587AFZZ	J	AC	Gear,Drive
304	NSFTM0291AFFW	J	AD	Shaft,Guide
305	PCOVP1333AFSA	J	AF	Cover,Mechanism

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
306	PCUSG0001AWSA	J	AD	Cushion (Green)
307	PCUSG0004AWSA	J	AD	Cushion (Red-Brown)
⚠ 308	DCTRH8005SJ01	J	BA	Pickup Unit Ass'y
308- 1	————		—	Pickup Unit (Not Replacement Item)
308- 2	MSPRC0961AFZZ	J	AA	Spring,Rack
• 308- 3	NGERR0043AFZZ	J	AC	Gear,Rack
701	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
702	XBBSD20P03000	J	AA	Screw,ø2×3mm
703	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
704	XHBSD20P05000	J	AA	Screw,ø2×5mm
M701	RMOTV0408SJM4	J	AQ	Motor with Chassis [Spindle]
M702	RMOTV0409AFM1	J	AN	Motor with Gear [Sled]
SW702	QSW-F9001AWZZ	J	AE	Switch, Push Type [Pickup In]

CABINET PARTS

201	GCABA1079SJSA	J	AQ	Top Cabinet
202	GCABB1086SJSA	J	AN	Bottom Cabinet
203	GCOVA1018SJSA	J	AD	Cover,Remote Sensor
204	GFTAT1015SJSA	J	AN	CD Lid
205	HDECA1018SJSA	J	AS	Plate,Operation
206	HDECQ0079SJSA	J	AN	CD Window
207	HDECQ0080SJSA	J	AF	CD Illuminator
208	HDECQ0081SJSA	J	AE	LCD Window
209	HDECQ0093SJSA	J	AF	Plate,Decoration
210	HDECQ0083SJSA	J		Indicator Panel,LCD
211	JKNBZ0063SJSA	J	AF	Knob,Operation
212	CMECB0004SJ02	J		Tape Mechanism Ass'y
212- 1	94R19210703	J	AE	Belt,FF/REW
212- 2	9GD19210943	J	AG	Belt,Main
212- 3	94R192104309	J	AG	Pinch Roller Arm Ass'y
212- 4(SOL901)	9GD19212118	J	AP	Solenoid Ass'y
212- 5	9GD62161401	J	AN	Head,Erase
212- 6	94R62010111	J	AT	Head,Record/Playback
212- 7(SW901)	9GD640101210	J	AE	Switch,Leaf Type [Fool Proof]
212- 8(SW902)	9GD640101210	J	AE	Switch,Leaf Type [Cam]
212- 9(M901)	9GD192112344	J	AY	Motor with Pulley [Tape]
212-10(PWB-E)	9GD192121303	J	AZ	Tape Mechanism PWB Ass'y
• 212-11(PWB-F)	9GD192121304	J	AW	Tape Mechanism PWB Ass'y
213	LANGF0040SJFW	J		Bracket,Lid,Top
214	LANGF0041SJFW	J		Bracket,Lid,Side
216	LCHSM0016SJFW	J		Chassis
217	LHLDM1005SJSB	J	AE	Stabilizer
218	LHLDW1001SJZZ	J	AD	Nylon Band
219	LHLDZ1048SJSA	J		Holder,Gear Box
220	LHLDZ1049SJSA	J		LCD Holder
221	LHLDZ1056SJSA	J		Holder,LED
222	LHLDZ1057SJSA	J		Holder,LED
223	MLEVP0009SJZZ	J		Lock Lever,Tape
224	MSPRD0019SJFJ	J		Spring,GND
227	PCOVS1003SJSA	J		Tape Mechanism Cover
228	PCOVS1004SJSA	J		PWB Shield Cover
229	PCOVS1005SJSA	J		PWB Shield Cover (Back)
230	PCOVS3008SJFW	J		PWB Shield
231	PCOVS7002SJFW	J		Shield Cover
233	PCUSG0011SJSA	J		Cushion,Lid
234	PCUSG0013SJSA	J		Cushion,Leg
235	PMAGF0002AWZZ	J	AE	Magnet
236	PRDAR0059SJFW	J		Radiator
238	PSHEP0006SJSA	J		Sheet,Diffuse
239	PSPAI0001SJZZ	J	AB	Spacer
240	QFSHD0001AWZZ	J	AB	Holder,Fuse
241	TLABS0042SJZZ	J		Label,Laser
242	TSPC-0322SJZZ	J		Label,Specification [Except for U.K.]
242	TSPC-0330SJZZ	J		Label,Specification [For U.K.]
243	CGERW0008SJ01	J	AP	Gear Box Ass'y
243- 1	LHLDZ1041SJSA	J		Lid,Gear Box
243- 2	LHLDZ1042SJSA	J		Gear Box
243- 3	NGERW0008SJSA	J		Gear,Drive
243- 4	NGERW0009SJSA	J		Worm Wheel
243- 5	NGERW0010SJSA	J		Worm Gear
• 243- 6	RMOTV0004SJZZ	J	AL	Motor [CD Lid],M801
601	LX-HZ0087AFFD	J	AA	Screw,ø3×8mm
603	LX-JZ0001SJFD	J	AA	Screw,ø3×10mm
604	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
605	XEBSD25P08000	J	AA	Screw,ø2.5×8mm
606	XEBSD25P10000	J	AA	Screw,ø2.5×10mm
607	XEBSD25P12000	J	AA	Screw,ø2.5×12mm
608	XEBSD30P10000	J	AA	Screw,ø3×10mm
609	XEBSF25P10000	J	AC	Screw,ø2.5×10mm
610	XHBSD20P03000	J	AA	Screw,ø2×3mm
611	XHBSD20P04000	J	AA	Screw,ø2×4mm
612	XHBSD20P06500	J		Screw,ø2×6.5mm
613	XHBSD40P06000	J	AA	Screw,ø4×6mm
616	XJBSD30P08000	J	AA	Screw,ø3×8mm
619	XJBSF30P10000	J	AA	Screw,ø3×10mm
620	XWHSD40-08000	J		Washer,ø4×8mm

SPEAKER BOX PARTS

901	GBOXS6003SJSA	J	AS	Box Ass'y
902	GLEGP0003SJSB	J	AD	Leg
903	GWAKP1020SJ01	J	AL	Net Flame Ass'y
903- 1	————		—	Net Flame (Not Replacement Item)
903- 2	PGUMM0003SJSA	J	AD	Net Catcher
• 903- 3	HBDGA1002SJSA	J	AF	Badge,SHARP
904	HPNLS1011SJ01	J	AQ	Front Panel Ass'y
904- 1	————		—	Front Panel (Not Replacement Item)
904- 2	HDECQ0073SJSA	J	AG	Panel,Tweeter
904- 3	PCOVZ1003SJSA	J	AG	Duct Cap
• 904- 4	PDUC-0005SJZZ	J	AE	Duct Pipe
905	PSPAG0005SJZZ	J	AE	Gsket
906	QTANA9011SJZZ	J	AE	Terminal
907	————		—	Specification Label
908	XTBSF40P12000	J	AA	Screw,ø4×12mm
SP601,602	RSPA00020SJ8W	J	AQ	Woofer
SP603,604	RALMB0001SJZZ	J	AH	Tweeter

ACCESSORIES/PACKING PARTS

1	QACCB0003SJ00	J		AC Power Supply Cord [For U.K.]
1	QACCE0002SJZZ	J		AC Power Supply Cord [Except for U.K.]
2	QANTL0001SJZZ	J	AK	AM Loop Antenna
3	QANTW0002SJZZ	J	AH	FM Antenna
4	QCNWH0009SJZZ	J		Speaker Wire
5	RRMCG0044SJSA	J	AU	Remote Control
• 5- 1	GCABB1064SJSB	J		Battery Lid,Remote Control
6	SPAKA0118SJZZ	J		Packing Add.,Left
7	SPAKA0119SJZZ	J		Packing Add.,Right
8	SPAKC0223SJZZ	J		Packing Case
9	SPAKZ0066SJZZ	J		Pad,Accessories
10	SPAKZ0067SJZZ	J		Support Pad
11	SSAKA0009SJZZ	J		Polyethylene Bag,Accessories
12	SSAKH0018SJZZ	J		Polyethylene Bag,Unit
13	TCADN0003SJZZ	J		Register Card [U.K.Only]
14	TINSE0099SJZZ	J		Operation Manual [For U.K.]
14	TINSZ0138SJZZ	J	AP	Operation Manual [Except for U.K.]
15	TINSE0100SJZZ	J		Quick Guide [U.K.Only]
16	SPAKZ0061SJZZ	J		Polyethylene Bag,Speaker
17	TLABE0110SJ01	J		Label,Bar Code
18	TLABN0187SJZZ	J		Label,Serial No. [Except for U.K.]
19	TLABN0211SJZZ	J		Label,Serial No. [For U.K.]
20	TLABZ0067SJZZ	J		Label,Serial No. [Except for U.K.]
21	————		—	Battery (UM-4) (Not Replacement Item) [Except for U.K.]
22	SPAKA0110SJZZ	J		Packing Add.,Speaker [Top/Bottom]
23	SPAKS0006SJZZ	J		Sleeve Carton,Speaker

P.W.B. ASSEMBLY (Not Replacement Item)

⚠ PWB-A1~4	DCEKMV196SJ03	J		Main/Terminal/Motor/Holder
PWB-B1~5	DCEKNV196SJ03	J		Display/Switch/Switch/Led/Led
PWB-C1,C2	DCEKJV155SJ03	J	BF	Tuner/Holder
PWB-D	QPWBF3895AFZZ	J	AC	CD Motor (PWB Only)
PWB-E	9GD192121303	J	AZ	Tape Mechanism PWB Ass'y
PWB-F	9GD192121304	J	AW	Tape Mechanism PWB Ass'y

OTHER SERVICE PART

	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner Disc

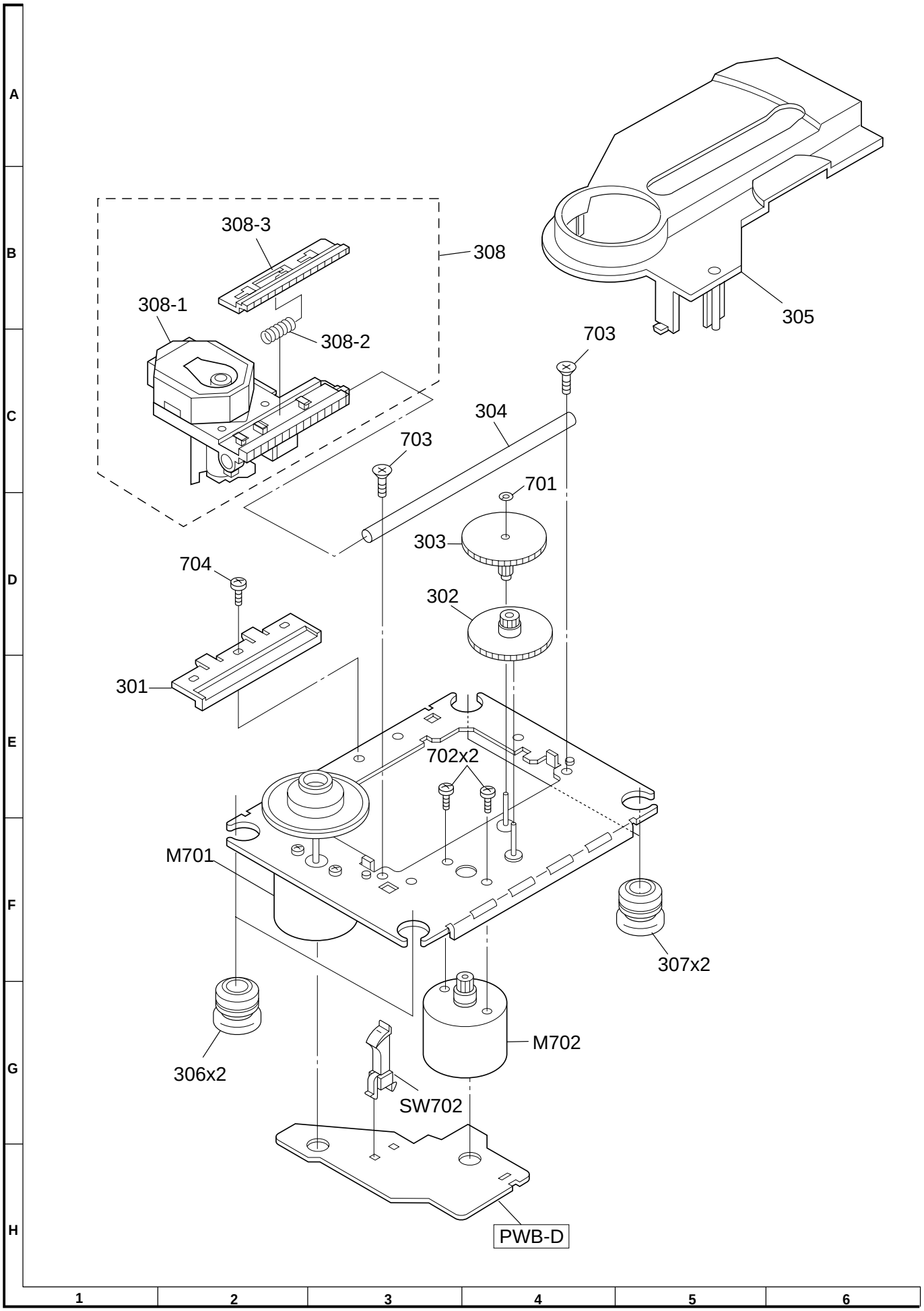


Figure 6 CD MECHANISM EXPLODED VIEW

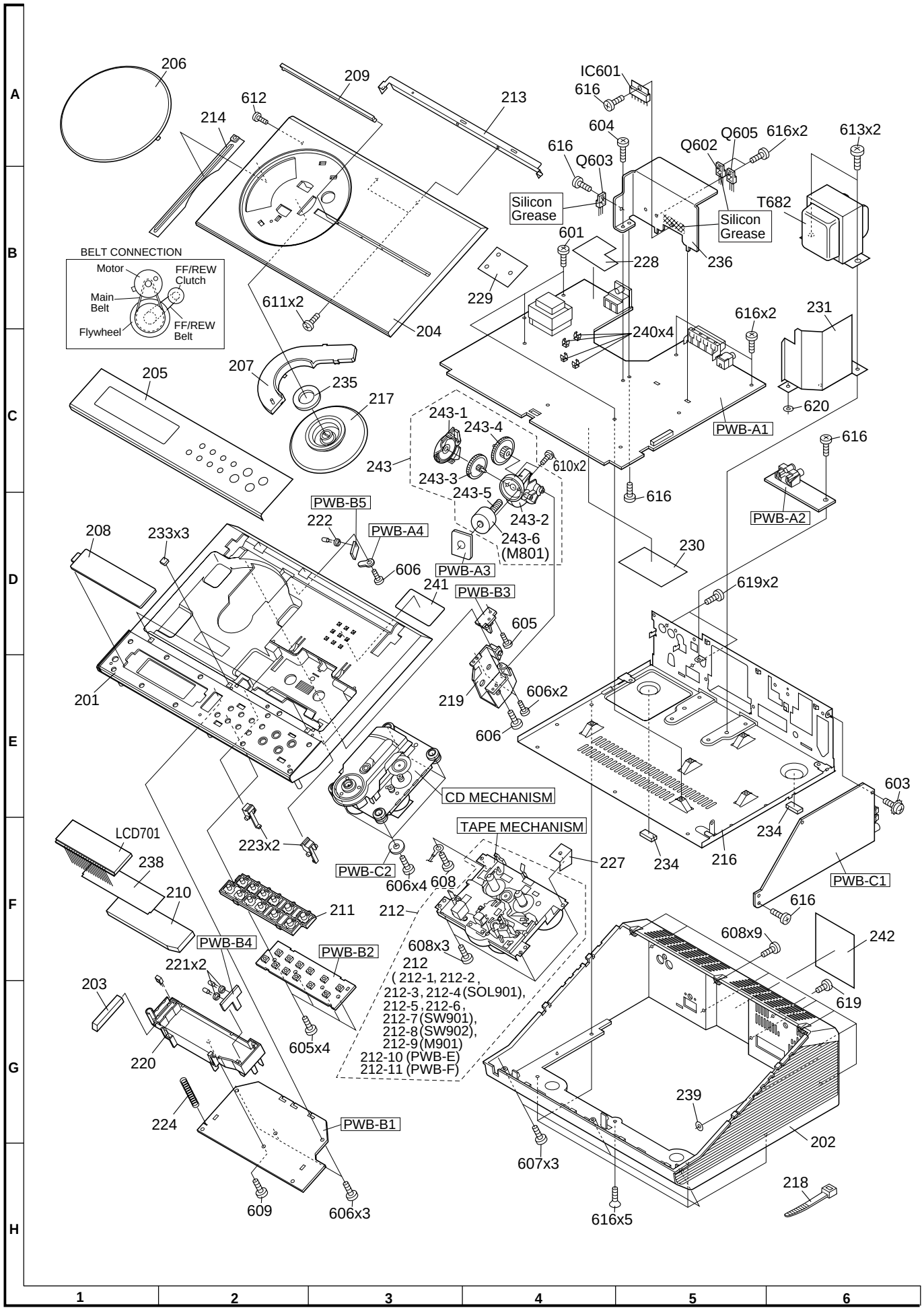


Figure 7 CABINET EXPLODED VIEW

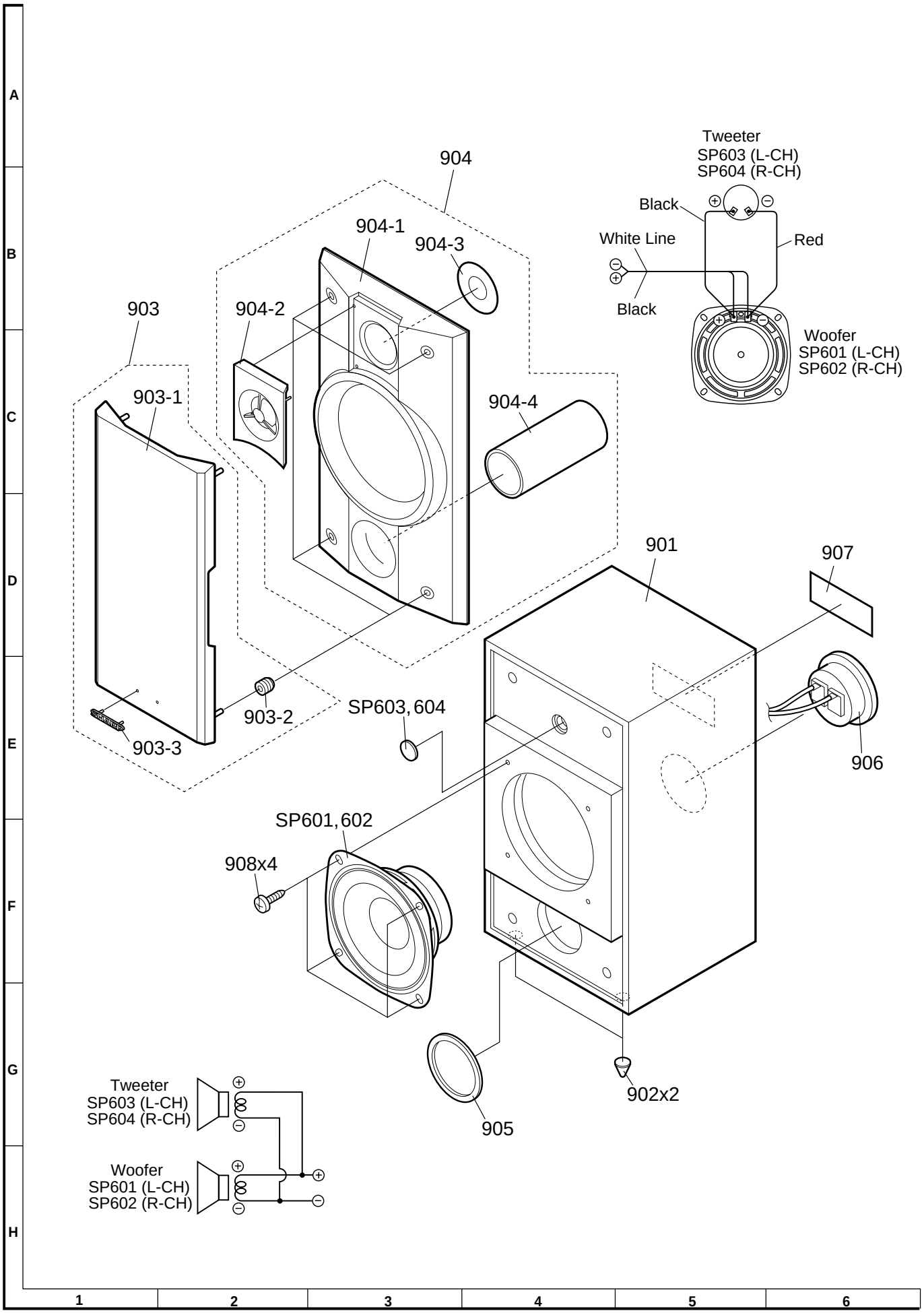
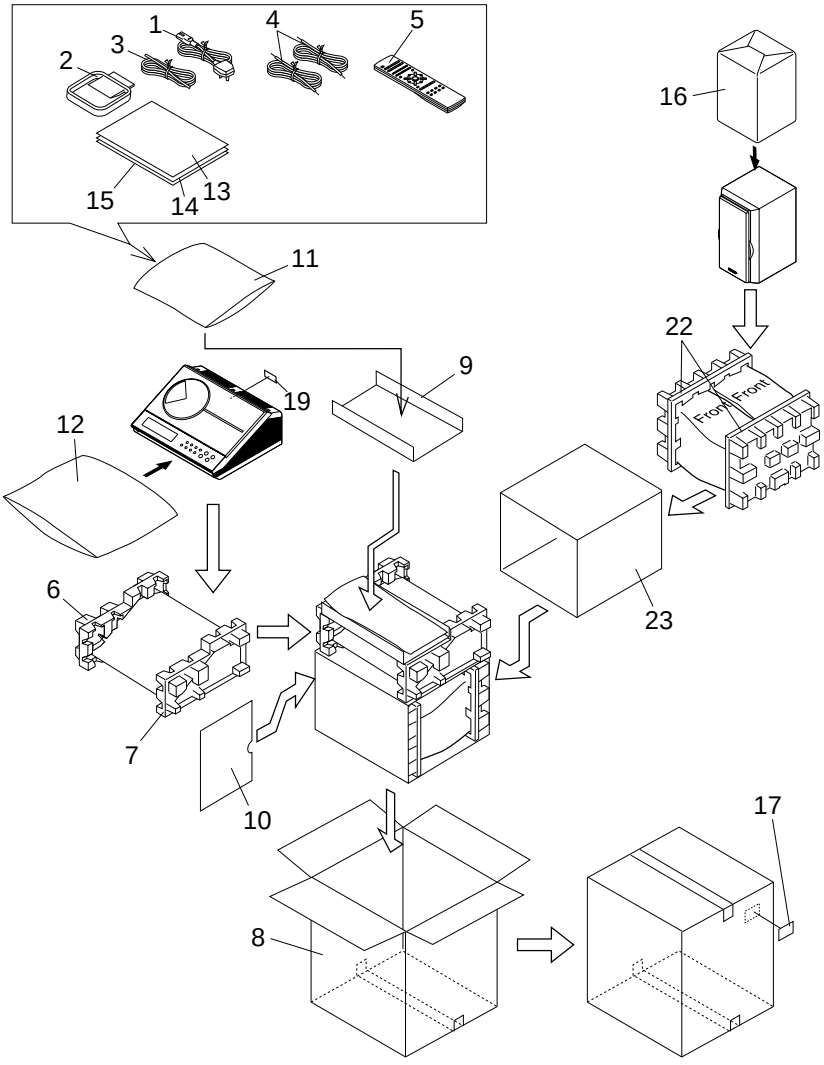


Figure 8 SPEAKER EXPLODED VIEW

PACKING OF METHOD (FOR U.K. ONLY)

1. AC Power Supply Cord	QACCB0003SJ00	11. Polyethylene Bag, Accessories	SSAKA0009SJZZ
2. AM Loop Antenna	QANTL0001SJZZ	12. Polyethylene Bag, Unit	SSAKH0018SJZZ
3. FM Antenna	QANTW0002SJZZ	13. Register Card	TCADN0003SJZZ
4. Speaker Wire	QCNWH0009SJZZ	14. Operation Manual	TINSE0099SJZZ
5. Remote Control	RRMCG0044SJSA	15. Quick Guide	TINSE0100SJZZ
6. Packing Add., Left	SPAKA0118SJZZ	16. Polyethylene Bag, Speaker	SPAKZ0061SJZZ
7. Packing Add., Right	SPAKA0119SJZZ	17. Label, Bar Code	TLABE0110SJ01
8. Packing Case	SPAKC0223SJZZ	19. Label, Serial No.	TLABN0211SJZZ
9. Pad, Accessories	SPAKZ0066SJZZ	22. Packing Add., Speaker [Top/Bottom]	SPAKA0110SJZZ
10. Support Pad	SPAKZ0067SJZZ	23. Sleeve Carton, Speaker	SPAKS0006SJZZ

Setting position of switches and knobs	
CD Lid	CLOSE



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